he Itlining Immal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES. [The Maning Journal is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2194.-Vol. XLVII.

LONDON, SATURDAY, SEPTEMBER 8, 1877.

SUPPLEMENT. PER ANNUM, BY POST, &1 48.

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I but Price List, issued at 5 F.M., giving latest Quotations up to close of the Price List, issued at 5 F.M., giving latest Quotations up to close of the Price List, issued at 5 F.M., giving latest Quotations up to close of the Price List of all Securities curvicals upon the Mining and Stock Exchanges, with latest prices, current with the Constant of Interest yielded at market price, &c.

Mines (Sty Bank, London; South Cornwall Bank, St. Austell.

ment Dealines in the following, or part:—
in feat, £3%. 25 Holmbush, 32s. 20 Richmond, £4½.

10 Roman Gravels, £9½.

25 San Pedro.

25 South Aurora, 4s. 3d.

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20 Tankerville, £9½.

20 W. Tankerville, 18s.

20 ditto (pref.), £2½.

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15 West Chiverton, £18¼

15 Wheal Newton.

50 Yorke Peninsula, 5s. he following, or part:—
25 Holmbush, 328.
20 Hultafail.
10 Javali, 7a. 6d.
11 Lawes Cheinical, £7½
20 Leadhills, £5½.
25 Llanrwst. £2½.
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20 New Quebrada, £2½.
20 North Laxey, 15s.
20 Pateley Bridge, £2½.
10 Pestarena, 4s. 3d.
50 Parys Moun., 6s.
20 Port Phillip, 9s. 6d.
100 Rookhope, 18s. 6d.
08wand DeLIVERY (ONE, 2. £3. micago, £3.

Chapel House, £2½.

Chootales, 76. 3d.

Combinartin, 78.

Ceroo Cons., £3 15s.

Capataff, £2½.

Corondd and Merllyn. winion, £3%.

Segrilos, £3%.

150 Parys Moun., o...

150 Pa

m are LAVITED for:

mod Collery.

20 Condes of Chili,

addubant.

10 D'Eresby.

20 Derwent. 20 Llangan. 20 St. Patrick. 10 West Craven Moor. in - East Craven Moor, Lisburne, Last Chance, a, Pennant, Pandora, Piynlimmon, Santa Barbara,

ORIGN BONDS — ARGENTINE — EGYPTIAN—RUSSIAN, TURKISH, SPANISH, PERU. MILWAYS—HOME AND FOREIGN. MILD BUSINESS in the above, and Fortnightly Accounts opened on receipt

(fixed orec.

TEI WAR.—The latest Telegrams from the SEAT OF WAR are received
modeltheds, and also the course of the Markets from EVERY CONTINENTAL
MEE. JAMES H CROFTS, 1, FINCH LANE, LONDON.

GARIUM, HOTEL, INSURANCE, AND MISCELLANEOUS

SHARES.
BEGLA BUSINESS in Brighton Aquarium and Royal (Westminster).
OTHE WANTED for 20 Yarmouth Aquarium.
BUSS in Politive Assurance.
BUSS in

ULTAFALL LEAD.—SPECIAL BUSINESS in these shares alone prices (either as BUYER or SELLER). JAMES H. CROFTS, 1, FINCH LANE, LONDON.

OTION SPINNING SHARES.—BUSINESS in all OLDHAM
UMARE, and in those of other DISTRICTS.
"**PECIAL BUSINESS in the following SMLECTED SHARES:—

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Omtral						00	00	10	20		Buyer		Bellers	
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Green Las	10	***	***		***	30,	25,	20,	20	***	60	***	65	
Vidham '	wist			***	***	26.	12.	15,	5	***	19	***	21	
Royton	***	***	***	***	***	30.	20,	10.	10	***	134		2	
Baw	***	***	***			20.	16.	10,	16	***	134		2%	
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rieds won!	d be	RTIG	men	had								B. v.		0

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50 Glyn, 12s.
70 LX.L., 5s. 9d.
40 Javali, 5s. 6d.
52 Kapanga, 35s. 6d.
50 Last Chance, 21s.
50 Marke Valley, 17s. 9d.
60 North Laxey, 10s. 6d. 80 Tecoma, 11s. 6d.
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—Share-List, &c. No. 789-Vol. XV. For September.

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Aberdaunant 8s.	10s.	Minera	£16	£18
Argentine £21/2	& 3	North Laxey	145	16s.
Assheton		New Quebrada		
Bodidris 1	11/4	New Zealand Kapanga		
		Parys Mountain	Ra.	70
		Datalan Buidan	2	
		Pateley Bridge	2	
	14 33/4	Richmond	436	45%
Dolcoath 21	23	Roman Gravels	91/3	93/4
Don Pedro 8s.	10s.	Rookhope	178	198.
	34 6	San Pedro	36	3/4
East Caradon 5s.	7s. 6d,	St. Patrick	1	1%
	14 43/4	South Condurrow		
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Glenroy 2	5/8 27/8	Van	80	
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	7/4 1	West Godolphin	2	256
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Marke Valley	M 1			

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(Formerly Student at the Royal Bergakademie, Clausthal).

[The Author reserves the right of reproduction.] SECTION III.

BLASTING MATERIALS.

MIXED GUNPOWDERS.—In the year 1817 it was reported from Brazil that by mixing gunpowder with the meal of the satropha manihot a great saving in gunpowder had been obtained. Trials were made by Herr Thurnagel in the lead mine Fredrick, Tarnowitz, in upper Silesia, by mixing the powder with sawdust. In other places trials have been made with dust of lycopodium, and such like seeds, which seem to confirm the statement that a saving of 30 per cent, in the use of gunpowder was effected. In the above-mattered mine the gunpowder was wixed with an equal quantity. mentioned mine the gunpowder was mixed with an equal quantity of sawdust, and for a period of two years and a half during which the trials were continued good results were obtained; but in other places the results have turned out very variable. In later experiments in the Fredrick lead mine, beside sawdust, horn and brass filings, bean, barley, buckwest, oat and rye chaff were tried, but showed no increase in the strength of the powder, at least none could be attributed to the development of gas from the sawdust, e'se the mixture with horn filings ought to have given a greater effect than with brass filings. In any case it might be assumed that the sawdust caused a more regular combustion of the powder.

e'se the mixture with horn filings ought to have given a greater effect than with brass filings. In any case it might be assumed that the sawdust cau-ed a more regular combustion of the powder, and, therefore, a better effect. In the United States the employment of a mixture of gunpowder and burnt lime has been introdured; but the effect of the mixture, even when the lime amounts only to 1-12th, is less than that due to a mixture of powder and sawdust. It is a fact pretty well known to most mining agents that the miners are in the habit of using more powder than is necessary, a fact which will explain most of the cases of a saving of powder when mixed with other substances.

Davey, of the firm of Bickford, Smith, and Davey, Tuckingmill, Cornwall, has proposed to replace part of the charcoal by meal, bran, starch, and similar substances, by which the danger in the preparation of the powder was to be obviated. The saltpetre is dissolved in water, so that by mixing with sulphur, charcoal, and meal (or starch, &c.). a thicker paste is formed, which is passed between a pair of rolls, or pressed through a sieve, by which means it is formed into a thin band, or long narrow strips: these are caught on an endless band of cloth, and passed slowly through the drying chamber, after which they are broken by passing through a pair of wooden rollers. The holes in the sieve are made proportional to the size of grain in which it is desired to obtain the powder. The powder has a dull appearance, and is said to effect a saving of 35 per cent according to weight; besides being cheaper by weight than ordinary gunpowder, as less saltp-tre is required, and the preparation requires less time.

There would seem to be no reason why the introduction of neutral substances should increase the effect of powder, but rather the contrary, although under certain circumstances the addition of such

tral substances should increase the effect of powder, but rather the contrary, although under certain circumstances the addition of such a body as sawdust may be advantageous, as preventing the powder from cohering in lumps, so that a more regular combustion takes place. But there remains still the disadvantage that deeper holes are required, and the tendency of the powder to hang fire is in-creased, as part of the sawdust may remain for some time in a glowing condition.

LITHOFRACTEUR (or white blasting powder, not that generally known in this country as lithofracteur, which is a nitroglycerine compound, and which we shall describe further on) consists of a mixcompound, and which we shall describe further on) consists of a mixture of rough powdered saltpetre and sulphur, together with some
other carbonaceous substance in place of charcoal (probably meal
or bran, treated with nitric acid). It is difficult to ignite, and when
placed in a train, and ignited at one end, burns but slowly, and may
even go out before reaching the other end, so that when used it is
necessary to employ a long quick match, which is stuck to a depth
of Ain, in the carridge to cause a more ranid ignition throughout of 4in. in the cartridge, to cause a more rapid ignition throughout the mass. This powder has been tried at the mines Centrum and Moresnet, near E-chweiler, where the trials proved successful, the powder forcing off the rock without shattering it greatly, or hurlpowder forcing on the rock without snattering it greatly, or nuriing it violently from its position. In Upper Silesia this powder
has been used in hard rock with tolerably good results; but in
faulty and broken rock, and in coal, the powder burnt with little
effect. It would hence appear that it is only in a confined state,
by which the pressure brought to bear on it by the development of
the gas becomes very great, and the consequent sudden increase of
heat, that the rapidity of the combustion becomes sufficiently great
to cause masful effect.

to cause useful effect.

Küp, of Mühlheim, introluced about 12 years ago a powder, a nearly black looking substance, which appears to differ but little in composition from or linury gunpowder, but was said to possess the advantages—"not suddenly to explode, but to burn slowly, the effect being due to the expansion of the heated gases, and that it does not loss in effect on being moistened," and thus the danger during proposition, transport styring, and use was lessened if our during preparation, transport, storing, and use was lessened, if not obvited. The effect appears to be greater than that of ordinary powder in wide working faces, and where the rock is not very hard, as it has the advantage of not harling away but simply loosening the stone, so that in the winning of large coal its use was specially recommended. This is what might be expected if the effect of the the stone, so that in the winning of large coal to all the effect of the recommended. This is what might be expected if the effect of the powder is chiefly due to the gradual expansion of the gases produced; such a property of the powder, however, entails, on the contrary, a less effect in narrow hearlings, and with a very hard compact stone, than that of ordinary guapo weer, and it misses fire of the resource, besides. it burns more slowly there is more danger to the miner; besides, it possesses the property of cohering in lumps, especially after being damp, which causes its carrying in powder bags and its pouring into cartridges to be very inconvenient. This powder probably contains more substance. It was prepared in three different sorts; the first, which was of light yellow colour, was sold at 1s per pound, the second of a grey black colour at 54, per pound, and the third somewhat similar at 4½d. per pound. The high price of the first, and the bad smells of the gases produced on combustion of the third, probably due to sulphuretted hydrogen, have prevented them coming into any extensive use. The second sort, called "alkaloyd," has been tried in nearly all the Prussian mining districts, without coming into extensive use. coming into extensive use.

G. A. Neumever, of Taucha, near Leipsic, introduced in 1365 a powder, which appears to be similar to that just described. It consists of 75 per cent. of saltpetre, 6.25 per cent. of sulphur, and 1875 per cent, of charcoal, so that it contains 57 per cent. less of sulphur, and 5.5 per cent. more of charcoal than or linary gunpow-der. As might be expected from its containing less sulphur, the development of the gases are less rapid than in the case with ordimary gunpowder, so stead whilst for some purposes—coal and salt mines—it use would appear advantageous, in other cases—as in metalliferous mines, shaft sinking, and quarrying, where a sudden force is desired—its effect appears doubtful. It is sail to burn, but not to explode by access of air, and is not ignited by percussion or pressure, so that its carriage and storage are unattended with danger, and there is less residues and these mines is less residues and these sembles which is lighter and more and there is less residue and less smoke, which is lighter and more quickly carried away, and has no injurious influence on the miners.

The smoke appears to be less oppressive than that from ordinary powder, but in consequence of its hygroscopic character it detepowder, but in consequence of its hygroscopic character it deteriorates in effect with long keeping, and in faulty and jointy ground is comparatively without effect. Trials made with this powder at the coal mine König, in upper Silesia, are reported to have given very good results. Later trials, however, do not appear to have confirmed any of its supposed advantages over ordinary powder, for whilst the experiments at the König Coal Mine, in upper Silesia, at

the Mansfield Copper Mines, and at the Salt Mines of Stassfurth were not unfavourable the economical results obtained at the limestone quarry at Rüdersdorf have not been satisfactory.

At the coal mines at Brandeisl, in Prussia, a powder has been tried in which sugar has been used instead of charcoal. It is of a white yellow colour, with an appearance like flour. Its composition is 75 per cent. of sultpetre, 95 per cent of sulphur, and 145 per cent. of sugar. When ignited it burns more slowly and gives off less smoke than or linary powder, but leaves a larger residue.

POWDERS NOT CONTAINING SULPHUR.—As we have previously mentioned, sulphur is not an essential contituent of powder, Schultze, a German, has proposed a gunpowder which depends upon the principle before mentioned, that sulphur is not an essential constituent of gunpowder. This powder consists uf a mixture

tial constituent of gunpowder. This powder consists uf a mixture of saltpetre, and instead of charcoal wood is used. The wood is first cut by machines into small pieces, similar to the grains of or-dinary powder, and sorted by means of sieves, or otherwise, into different sizes, according to the purpose for which it is intended. It is then treated with acid, and an easily soluble salt, and afterwards treated with concentrated nitric and sulpharic acid. The grains are afterwards treated in a saturated so'ution of some nitric acid salt (Schultze prefers potassic or baric nitrate, or a mixture of both), dried, and separated from dust in a riddle. It is said to possess the great advantage over ordinary gunpowder that it can be moistened with water and afterwards dried, without losing in effect, and can be thus transported without danger, so that when it is obtained it only requires to be properly dried to be fit for use. It appears probable that this powder contains an excess of saltpetre, so that after being requires to be properly dried to be fit for use. It appears probable that this powder contains an excess of saltpetre, so that after being moistened, although part of the saltpetre may have been carried off in solution, there may still remain quite sufficient to cause complete combustion of the carbon. Besides, the carbon being in the form of wood would retain, like a sponge, better any moisture which might be condensed on it, and not allow it to drain off, carrying off the saltpetre. It is also nearly three times as light as ordinary gunpowder, but gives a much greater effect, and it is only necessary to fill the hole 1 or 2 in. higher in order to obtain the same result as with ordinary blasting powder, according to which 33 to 40 bs. of Schultze's powder is as effective as 100 bs. of the ordinary, so that the greater cost, of 1s, per pound, is fully compensate 1 for. The products of combustion are less injurious to the miner, and very little solid residue is left, so that in mining operations, where the blackening of the mineral is a question of importance (as in salt and some metalliferous mines), it possesses considerable advantages. Yet the considerable advantages which this powder appears to possess, and the satisfactory results obtained with it, still it has not come into extensive use, because on several occasions unexpected explosions have occurred, with fatal results; although when not in a confine 1 space it burns without detonation. It is possible that the treatment of the fibres of the wood with concentrated nitric acid forms a compound somewhat similar in composition and properties to guncotton. pound somewhat similar in composition and properties to guncotton. As the wood is also treated with sulphuric acid without any subsequent washing (which is Abel's essential improvement in the manufacture of guncotton), this may lead to a subsequent rapid oxidanufacture of guncotton), this may lead to a subsequent rapid oxida-tion, and consequent heating of part of the constituents of the powder, which may have been the cause of the above explosions, and, therefore, of its non-acceptance generally as a blasting material. The trials of this powder at the Mansfield copper mines gave very sati-factory economical results, but its use in the salt mines at Strassfurt, and at the limestone quarry near Rudersdorff, appear to have been carried on at a loss. At other places in Germany it has been stated to exercise an injurious effect on the health of miners, the gases produced on combustion causing heaviness on the chest

HALOXYLIN is the name given to a powder in which the sulphur HALOXYLIN is the name given to a powder in which the sulphur is entirely absent, and in which charcoal is replaced by wood or other vegetable fibres. In properties it is very similar to the two above-mentioned powders—Neumeyer's and Küp's—the gases developed on combustion being less in quantity and less injurious to the niners than ordinary gunpowder; it has a less useful effect in loose faulty ground than in firm rock, and possesses the disadvantage of leing hygroscopic. It is said not to explode in the open air, but what to have alongly and is therefore less depresses the profile party and is therefore less depresses the profile party and is therefore less depresses the continuous c only to burn slowly, and is, therefore, less dangerous than ordinary gunpowder, but an unexplained explosion of the Haloxylin Factory of Anders and Fehleisen, near Winterberg, in Bohemia, has lessened public faith as to its inexplosive qualities. In the Prussian mines he economical results of trials with this powder do not appear to lave been very satisfactory, so that it has not come into very exensive use on the Continent.

ON NATIVE COPPER, SILVER, AND GOLD IN ABNORMAL CONDITIONS.* By T. A. READWIN, F.G.S., M.R.I.A., &c.

Attention has already been directed by me to some interesting cent changes from normal conditions of certain minerals, containing severally copper, silver, and gold, and I would now specially refer to 15 specimens worthy of particular notice. All the metallic changes upon them have taken place at what may be called ordinary temperatures under ordinary conditions, and the observed changes have been distinguished by me (wanting a better term) as "Met il Growth." Perhaps, it is hardly safe to say that a mineral under observation at any time is in a normal condition, for most analyses y time is in a normal condition, for income and ence of substances thought to be foreign to the tion of the respective minerals analysed. In short disclose the presence of substances thought to be foreign to the chemical composition of the respective minerals analysed. In short, it is not clear that we actually know the original, normal, or ordinary conditions of any mineral whatsoever.

We are accustomed to say that every solid inorganic body is either amorphous or crystalline, but on examination it will be seen that amorphous or crystaline, out on examination it will be seen that none of the metal-growths present are either crystalline or amorphous. They are really multiform, although several of them (like many others in my possession) have a general resemblance. It is observable that some of these palpably recent exudations have occurred before and others after the decomposition of a sulphide, Others, as far as surface appearances reveal, exuded wholly independently of sulphides, &c. A natural continuity of transference of mineral substances into vegetable matter in the production of new courths, form, and sharped in a feature in the production of a sulphides. growths, form, and shapes is a fact universally admitted; and I submit that it has yet to be shown whether there is not also a similar varied continuity in mineral metamorphoses, inasmuch as there are evident nearnesses of relationship betwixt abnormal abores plumose, and other metallic shapes, and some of the lower vegetal appearances.

Thas been suggested as possible that one of the results of the visible ecomposition of a compound may be the generation of a kind of formation force "in one of the substances contained in it, somewhat real court "witel town." analogous to "vital force." Some such force may really be, but assuming it to be, it will only partially explain the phenomena now exhibited. There will remain unexplained the distinctive metal growth from undecomposed or normal sulphides, and more exanalogous to "vital force. traordinarily still, those growths from what appears to be pure silica in a normal condition, unassociated, as far as is known, with any other metallic substance. By process of negation the cause or causes of these mineral alterations may be pushed somewhat into a corner for determination. For example, under the known circumstances of these changes the action of water cannot be said to have had any influence, or green by influence and a pragricult. had any influence; of gaseous influence none can be imagined. There is a total absence of the usual observed effects of heat. Atmospheric influence is barely possible. Light, potential in plant movements, somehow may be a possible aid in mineral movement. or growths. A latent electro motive-power is also possible. No acid appears to have been concerned, except that of silicic acid, in the solid condition of quartz, in some of the specimens.

This leads to the idea that sometimes such growths derive their accumulating or aggregating particles from metal contained in the quartz matrix in a fluid state of infinite rarity, and as yet imperfectly understood, if not altogether unknown. The last idea in possible connection with electro-motive power of some kind may ultimately be found amongst the causes of such abnormal mineral conditions as these about to be described.

* Written by Mr. READWIN for the recent meeting of the British Association for the Advancement of Science,

Commencing with one of the may mention that one specim menced sending forth its coppe ago. Since February, 1876, I h of an inch, within the period of apex of the looped growth has a Silver growth is shown in two

growths from Mexican silver sul ous prolongations seen in the fi the brightest being of most infa the brightest being of most infa has curled off since Christmas, May 6 fast. There have been cimen in the same period, teresting silver growth out of specimen affords a very intereout of argentite in calcite. No phide is enclosed in a film, the vesce in acid. And a fifth specimple of silver growth out of unassociated with silver sulphiobtained by me on June 6 last at rec-ntly been taken out of the a ecently been taken out of the a good. Since that date I have silver movements in the third o little silver movement in the silver exudations have appeare and numerous delicate and pure The first and second of this seri sulphide (Acanthite). The ho first specimen has taken place a similar exudations in the sec-menths. months.
With regard to gold growth,

which show interesting recent a definitely, electrum growths) of normal condition, associated with Two other specimens show rece posed pyrites, associated with a cent electrum growth in quartz other metallic mineral. A sixt resting recent electrum growths ing chiefly since May 6 last. A haps the most intere-ting illust One filament is 1-10th in, long-mention that I have also electr mispickel, marcasite, tetrahedri present mineral associations, co

affinity" for silver, and quartz
I select these illustrations fro
are commonly called abnormal which I think may be not inap clusion, I beg to say that I do not uncommon occurrence, althopart unobserved, owing, it may substances took their present a ong anterior to the birth of li attention may be given to mine

MINING 1

We have been favoured by M Mines and Chief Inspector, wit for 1876. The Minister of Min that the non-discovery of new past year and the want of water the extreme dryness of the seas the yield of alluvial gold, but i obtained from the deeper level satisfactory yields. This shoul exploration of those neglected nof gold at shallow levels. The mine owners, mine managers, assistance courteously given to to their books, and otherwise f the compilation of the returns, are included in the returns this

tons 4 cwts.—which is the larg in any one year. The reluctance displayed by

lication of the results of their

longer exists, or exists but in is in the returns of quartz, quart treated now approaches so near raised from quartz reefs as to a accuracy of the several estimate that they are very nearly con checking the estimated yield of few of the mineowners in this the amount of washdirt and cer The e-timates for 1876 show th 100,000 ozs, than the quantity repears, moreover, that during the gold obtained from the alluvial that the yield of last year is les 1863. The general decrease is c exhaustion of the gold in the dr and to the non discovery of nev ance to compensate for the redu y-arly yield of gold from qui 585,575 ozs., the minimum in 18 Although the average than during the preceding five y the past 15 years, it is about equ quantity of pyrites and blanketi is a little less than the quantity yield of gold per ton is about the in the Santhurst district alone. not represented in this return.
The mining district giving the ton is Grappsland, and the next in

rushed in these districts as con larat districts is relatively small or sluiced during the year 1876, certain companies and individus the yield of gold from which was average of 2267 grs. per ton. specting the crushing of 35,9 ielded 8171 ozs. 15 dwts. 4 grs. 314 grs. per ton. The numbe 376, was—alluvial miners, 26 55 41,010. The number of alluvia number now employed is about since the same year the number of has also dimini-hed by over 200 of mining in 1876 as compared v were 14,158 Chinese engaged in engaged in 67. The there were but 11.167. per man per annum.

During the past five years the

in alluvial mining has decreased in quartz mining has increased b engines was employed in quartz in any preceding year. The esti

Being Notes on a Course of Lectures on Mining, delivered by Herr Bergrath, Dr. Vox Ghoddner, Director of the Royal Bergakademic, Clausthal, The Harr, Booth Germany.

Lectures on Bractical Mining in Germany.

CLAUSTHAL MINING SCHOOL NOTES-No. XLI.* BY J. CLARK JEFFERSON, A.R.S.M., WH. SC., Certificated Mining Engineer.

(Formerly Student at the Royal Bergakademie, Clausthal). [The Author reserves the right of reproduction.]

SECTION III. BLASTING MATERIALS

MIXED GUNPOWDERS .- In the year 1817 it was reported from Brazil that by mixing gunpowder with the meal of the satropha manihot a great saving in gunpowder had been obtained. Trials were made by Herr Thurnagel in the lead mine Fredrick, Tarnowitz, were made by Herr Thurnagel in the lead mine Fredrick, Tarnowitz, in upper Silesia, by mixing the powder with sawdust. In other places trials have been made with dust of lycopodium, and such like seeds, which seem to confirm the statement that a saving of 30 per cent, in the use of gunpowder was effected. In the abovementioned mine the gunpowder was mixed with an equal quantity of sawdust, and for a period of two years and a half during which the trials were continued good results were obtained; but in other places the results have turned out very variable. In later experiments in the Fredrick lead mine, beside sawdust, horn and brass filings, bean, barley, buckweat, oat and rye chaff were tried, but showed no increase in the strength of the powder, at least none could be attributed to the development of gas from the sawdust. e'se the mixture with horn filings ought to have given a greater could be attributed to the development or gas from the sawdust, else the mixture with horn filings ought to have given a greater effect than with brass filings. In any case it might be assumed that the sawdust caused a more regular combustion of the powder, and, therefore, a better effect. In the United States the employment of a mixture of gunpowder and burnt lime has been introduced; but the effect of the mixture, even when the lime amounts only to 1-12th, is less than that due to a mixture of powder and cawdust. It is effect pretix well known to most mining events. sawdust. It is a fact pretty well known to most mining agents that the miners are in the habit of using more powder than is necessary, a fact which will explain most of the cases of a saving

necessary, a fact which will explain most of the cases of a saving of powder when mixed with other substances.

Davey, of the firm of Bickford, Smith, and Davey, Tuckingmill, Cornwall, has proposed to replace part of the charcoal by meal, bran, starch, and similar substances, by which the danger in the preparation of the powder was to be obviated. The saltpetre is dissolved in water, so that by mixing with sulphur, charcoal, and meal (or starch, &c.), a thicker paste is formed, which is passed between a pair of rolls, or pressed through a sieve, by which means it is formed into a thin band, or long narrow strips: these are caught on an endless band of cloth, and passed slowly through the drying chamber, after which they are broken by passing through a pair of wooden rollers. The holes in the sieve are made proportional to the size of grain in which it is desired to obtain the powa pair of wooden rollers. The holes in the sieve are made proportional to the size of grain in which it is desired to obtain the powder. The powder has a dull appearance, and is said to effect a saving of 35 per cent according to weight; besides being cheaper by weight than ordinary gaupowder, as less saltp-tre is required, and the proporation required, less time.

by weight thin ordinary gunpowder, as less saltp-tre is required, and the preparation requires less time.

There would seem to be no reason why the introduction of neutral substances should increase the effect of powder, but rather the contrary, although under certain circumstances the addition of such a body as sawdust may be advantageous, as preventing the powder from cohering in lumps, so that a more regular combustion takes place. But there remains still the disadvantage that deeper holes are required, and the tendency of the powder to hang fire is increased, as part of the sawdust may remain for some time in a glowing condition. ing condition.

LITHOFEACTEUR (or white blasting powder, not that generally known in this country as lithofracteur, which is a nitroglycerine compound, and which we shall describe further on) consists of a mixture of rough powdered saltpetre and sulphur, together with some other carbonaceous substance in place of charcoal (probably meal or bran, treated with nitric acid). It is difficult to ignite, and when placed in a train, and ignited at one end, burns but slowly, and may even go out before reaching the other end, so that when used it is necessary to employ a long quick match, which is stuck to a depth of 4 in. in the cartridge, to cause a more rapid ignition throughout the mass. This powder has been tried at the mines Centrum and the mass. This powder has been tried at the mines Centrum and Moresnet, near E-chweiler, where the trials proved successful, the powder forcing off the rock without shattering it greatly, or hurling it violently from its position. In Upper Silesia this powder has been used in hard rock with tolerably good results; but in faulty and broken rock, and in coal, the powder burnt with little effect. It would hence appear that it is only in a confined state, by which the pressure brought to bear on it by the development of the gas becomes very great, and the consequent sudden increase of heat, that the rapidity of the combustion becomes sufficiently great to cause useful effect.

Küp, of Mühlheim, introduced about 12 years ago a powder, a

to cause useful effect.

Küp, of Mühlheim, introluced about 12 years ago a powder, a nearly black looking substance, which appears to differ but little in composition from or linary gangowder, but was said to possess the advantages—"not sublenly to explode, but to burn slowly, the effect being due to the expansion of the heated gases, and that it does not lose in effect on being moistened," and thus the danger during preparation, transport, storing, and use was lessened, if not obvisted. The effect appears to be greater than that of ordinary powder in wide working faces, and where the rock is not very hard, as it has the advantage of not harling away but simply loosening the stone, so that in the winning of large coal its use was specially the stone, so that in the winning of large coal its use was specially recommended. This is what might be expected if the effect of the powder is chiefly due to the gradualexpansion of the gases produced such a property of the powder, however, entails, on the contrary. such a property of the powder, however, entails, on the contrary, a less effect in narrow healings, and with a very hard compact stone, than that of ordinary gunpo wher, and it misses fire oftner, so that as it burns more slowly there is more danger to the miner; besides, it possesses the property of cohering in lumps, especially after being damp, which causes its carrying in powder bags and its pouring into cartridges to be very inconvenient. This powder probably contains more sulphur than or linary gunpowder, mixed with some earthy substance. It was prepared in three different sorts; the first, which was of light yellow colour, was sold at 1s, per pound, the second of a grey black colour at 51, per pound, and the third some first, which was of light yellow colour, was sold at 1s. per pound, the second of a grey black colour at 51. per pound, and the third somewhat similar at 4½d. per pound. The high price of the first, and the bad smells of the gases produced on combustion of the third, probably due to sulphuretted hydrogen, have prevented them coming into any extensive use. The second sort, called "alkaloyd," has been tried in nearly all the Prussian mining districts, without ing into extensive use.

A. Neumeyer, of Taucha, near Leipsic, introduced in 1365 a

powder, which appears to be similar to that just described. It consists of 75 per cent. of saltpetre, 6.25 per cent. of sulphur, and 18.75 per cent, of charcoal, so that it contains 5.7 per cent. less of sulphur, and 5.5 per cent, more of charcoal than o As might be expected from its containing der. As might be expected from its containing less sulphur, the development of the gases are less rapid than in the case with ordinary gunpowder, so that whilst for some purposes—coal and salt mines—it use would appear advantageous, in other ca-ea—as in metalliferous mines, shaft sinking, and quarrying, where a sudden force is desired—its effect appears doubtful. It is said to burn, but not to explode by access of air, and is not ignited by percussion or pres-ure, so that its carriage and storage are unattended with danger, and there is less residue and less smoke, which is lighter and more quickly carried away, and has no injurious influence on the miners. The smoke appears to be less oppressive than that from ordinary powder, but in consequence of its hygroscopic character it deteriorates in effect with long keeping, and in faulty and jointy ground is comparatively without effect. Trials made with this powder at the cual mine König, in upper Silesia, are reported to have given very good results. Later trials, however, do not appear to have confirmed any of its supposed advantages over ordinary confirmed. confirmed any of its supposed advantages over ordinary powder, for whilst the experiments at the König Coal Mine, in upper Silesia, at

the Mansfield Copper Mines, and at the Salt Mines of Stassfurth were not unfavourable the economical results obtained at the lime-

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decomposition of a compound may be the generation of a kind/of "formation force" in one of the substances contained in it, somewhat analogous to "vital force." Some such force may really be, but assuming it to be, it will only partially explain the phenomena now exhibited. There will remain unexplained the distinctive metal growth from undecomposed or normal sulphides, and more extraordinarily still those growths from what appears to be pure ordinarily still those growths from what appears to be pure silica in a normal condition, unassociated, as far as is known, with any other metallic substance. By process of negation the cause or causes of these mineral alterations may be pushed somewhat into a corner for determination. For example, under the known circumstances of these changes the action of water cannot be said to have had any influence; of gaseous influence none can be imagined. There is a total absence of the usual observed effects of heat. Atmospheric influence is barely possible. Light, potential in plant movements, somehow may be a possible aid in mineral movements or growths. A latent electro motive-power is also possible. No acid appears to have been concerned, except that of silicic acid, in the solid condition of quartz, in some of the specimens. This leads to the idea that sometimes such growths derive their

accumulating or aggregating particles from metal contained in the quartz matrix in a fluid state of infinite rarity, and as yet imperfectly un lershood, if not altogether unknown. The last idea in possible connection with electro-motive power of some kind may ultimately be found amongst the causes of such abnormal mineral conditions as these about to be described.

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Commencing with one of the abnormal conditions of con-

Commencing with one of the abnormal conditions of tops may mention that one specimen, a cherty-quartz fragment ago. Since February, 1876, I have noticed a growth and there yet of an inch, within the period of three weeks. The movements apx of the looped growth has sensibly increased since April It stiver growth is shown in two specimens; these are recent in our prolongations seen in the first of these are all of resent the principle of these are all of resent the principle of these are all of resent the or the second the second three weeks. The movement is the principle of most infantine growth. All the sire of these christmas, and most of it has resulted as may 6 last. There have been fewer alterations of the second threst in the same period. A third specimen ethibit and the specimen affords a very interesting illustration of silver to out of argentite in calcite. Nearly the whole of the silver specimen affords a very interesting illustration of silver to phide is enclosed in a film, the materials of which will not exceed in acid. And a fifth specimen is an extremely interesting ample of silver growth out of what appears to be normal can appear to be normal can appear to be normal to be appeared with silver sulphide. The last three specimens obtained by me on June 6 last at Kongsberg, in Norway, and have recently been taken out of the ancient silver mine in the neighbour and numerous delicate and purely argentite growths in the critical silver movements in the third of these specimens, and only one silver exadations have appeared from the fluctored area and numerous delicates and purely argentite growths in the critical specimen has taken place whilst in my possession, and the sinilar exudations in the second specimen within the last months.

With regard to gold growth, I will first refer to two speciments which show intere-ting recent argentiferous cald.

With regard to gold growth, I will first refer to two species With regard to gold growth, I will first refer to two special which show intere-ting recent argentiferous gold growths (or definitely, electrum growths) out of iron sulphids (pyries) normal condition, associated with quartz. [M.-t.4 = 80 Au 2). Two other specimens show recent electrum growths out of deep posed pyrites, associated with quartz. A fifth specimen show cent electrum growth in quartz (apparently) unassociated with other metallic mineral. A sixth specimen shows extremely in resting recent electrum growths in an indexed quartz carity, as indexed quartz carity, as indexed quartz carity, as considered with the control of the control of

other metallic inheral. A state by claim anows extremely ing chiefly since May 6 last. And a seventh specimen shows haps the most intere-ting illustrations of recent electron groups one filament is 1-10th in. longer than it was on May 6 last. It mention that I have also electron growths out of galens, is mispickel, marcasite, tetrahedrite, tetra lymite, and barytes. It present mineral associations, calcite appears to have a "superficient of silver, and quartz for gold.

I select these illustrations from a considerable number of a recommonly called abnormal conditions of native metals, may which I think may be not inaptly called metal growths. In clusion, I beg to say that I do not think such facts as these are of uncommon occurrence, although they may have been for the part unbeserved, owing, it may be, to the popular idea that mis substances took their present shapes and forms in time period long anterior to the birth of living mineralogists. I have the contract in the horse that the first have the contraction to the first of the product in the forms. long anterior to the birth of living mineralogists. I have, tore, brought the facts forward in the hope that in the future attention may be given to mineral changes in their relation to

MINING IN VICTORIA.

We have been favoured by Mr. Thomas Couchman, Secretar Mines and Unief Inspector, with the Mineral Statistics and Ref for 1876. The Minister of Mines—Mr. William McLellan—and that the non-discovery of new areas of auriferous drift during past year and the want of water for sluicing operations, cause the extreme dryness of the season, have operated prejudicially the yield of alluvial gold but it is gratifying to feel that the the sextreme dryness of the season, have operated prejudicially the yield of alluvial gold, but it is gratifying to find that the obtained from the deeper levels of the vein mines continues to satisfactory yields. This should act as an incentive to the exploration of those neglected mines which gave satisfactory of gold at shallow levels. The D-partment is again indebt mine owners, mine managers, managers of banks, and other sentences of the partment is again that the object of the officers by grating them. assistance courteously given to its officers by granting them to their books, and otherwise furnishing information required the compilation of the returns. Over one million tons of are included in the returns this year—the exact quantity is 1.9 tons 4 cwts. - which is the largest quantity of quartz yet re

in any one year.

The reluctance displayed by mineowners in years past to the lication of the results of their crushing operations either no longer exists, or exists but in isolated cases. The total yields in the returns of quartz, quartz tailings, and pyrites crush treated now approaches so nearly to the estimated amount raised from quartz reefs as to afford very satisfactory proof accuracy of the several estimates, and there can be but little that they are very nearly correct. There are no such m checking the estimated yield of alluvial gold, in consequent few of the mineowners in this branch of mining keeping see the amount of washdirt and cement passed through the mines for 1876 show that the yield of gold was a 100,000 ozs. than the quantity raised in the preceding year, pears, moreover, that during the past nine years the quantity raised in the preceding year, or the state of the pear of few of the mineowners in this branch of mining keeping than during the preceding five years, the statistics show that, if the past 15 years, it is about equal to the mean for that period quantity of pyrites and blanketing operated on during the past as a little less than the quantity treated during 1875; the an yield of gold per ton is about the same. Over 5000 tons were to in the Sunthurst district alone. Ararat is the only mining dis-

in the Sin-flurat district alone. After it is the only lambda not represented in this return.

The mining district giving the highest average return of gotton is Gippsland, and the next is Ararat, but the quantity of gotton crushed in these districts as compared with the Sandhurst and larat districts is relatively small. The quantity of washdirpular or sluiced during the year 1876, according to the returns my certain companies and individual miners, was 574.164 tons 2 the yield of gold from which was 27,116 oza, 13 dwts. 22 grs, daverage of 22 67 grs, per ton. Information has been obtained the yield of gold from which was 27,116 ozs. 15 dwis. Let ye average of 2267 grs. per ton. Information has been obtain percting the crushing of 35,938 tons 7 cwts. of cement, yielded 8171 ozs. 15 dwts. 4 grs. of gold, or an average of 3:14 grs. per ton. The number of persons employed on B 3876, was—alluvial miners, 26 558; quartz miners, 14,452; to 11,010. The number of alluvial miners is still decreasing 41,010. The number of alluvial miners is still decreasing number now employed is about 10,000 less than in the year since the same year the number of miners employed in quartz has also diminished by over 2000, but the decrease in both for mining in 1876 as compared with 1875 is only 707. In 1876, which is a superior of the same years 14.00 ft. iners is still decre of mining in 1876 as compared with 1875 is only 707. In 1872 were 14,158 Chinese engaged in mining pursuits, whilst in there were but 11,167. The Chinese miners have decrease number annually since the year 1831, when they amounted to 2 Although the Chinese miners do not in this colony becomes in other industrial pursuits, like the European mines, it is markable coincidence that their decrease in numer is all accounts of the same relative proportion. Dividing the valued gold exported and received into the Mint amongst the number of miners employed in the year 1876 the average is 891.19 number of miners employed in the year 1876 the average is 89%.

During the past five years the number of steam-engines et in alluvial mining has decreased by 90, and the number of in quartz mining has increased by 10. A greater number of engines was employed in quartz mining during the last reliance of the value of the many preceding year. The estimates of the value of the many preceding year.

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on. It is the water

* Being Notes on a Course of Lectures on Mining, delivered by Herr Bergrath, Dr. Von GBODDEK, Director of the Royal Bergakademic, Clausthal, The Harz, North Germany.

splines in use on the several gold fields of the colony for the splines how: -2,098,5744; 2,131,1884; 2,078,9364; 2,033,6294; inverse; 5007, respectively. The approximate area of auritation of the proximate area of auritation of the several mining operations extended up to the end in 184 guare miles, and the number of distinct quartz reefs to in 184 square miles, and the number of distinct quartz reefs and he area held under leases from the Crown, on Dec. 31, and the area held under leases from the Crown, on Dec. 31, and the area held under leases from the Crown, on Dec. 31, and the area held under leases, 19,249 acres.

The color of the provisions of the bye-laws of the several mining as def the area held under leases, 19,249 acres.

The color of the several mining the loads. One was a transpired to the several mining the start increasingly greater depths, notwithstanding the large year at increasingly greater depths, notwithstanding the large year and the sease of the sease

of gold to the ton.

of gold produced in the statistics also afford much interesting information.—

there were 3388 tons 10 cwts. of argentiferous ore raised the year, and 26,356 czs. 7 dwts. 19 grs. of silver were oblevial gold the Mint—TIN: The exports of tin during the year were copper: There were 37 tons of conner ore raised. the Mint—Tin: The exports of tin during the year were with—COPPER: There were 37 tons of copper ore raised pyar.—ANTIMONY: There were raised during the year jews. 2 qrs. of antimony ores, and 606 tons 19 cwts. of sews. 2 qrs. of antimony regulus, and 254 tons quite antimony were exported.—LRAD: The quantity of tied during the year was 17 tons 6 cwts—IRON: Of iron test raised.—COAL: There were 1095 tons of coal raised.—COALITE: The quantity of lighting raised.—COALITE raised.—

senied during the year was 17 tons of volume 12. So from the were raised.—Coal: There were 1095 tons of coal raised was the year.—Lignite: The quantity of lignite raised was the year.—Lignite: The quantity of lignite raised was the year.—Ender: There were 1735 tons 1 cwt. 3 qrs. of my quarried. Full information relative to the exploration of a yearried. Full information relative to the exploration of a particular the report, and there are many valuable remarks with relative to the number of casualties which occurred in consisting the period reported on, the mother construction of the period reported on, the mother of the colony, as compared with 275 in 1875, and 296. The number of miners has decreased each year, but a much administration is shown in the number of accidents. In the state of accidents 206; 90 persons were killed, and the total state of the colony. There were 275 accidents, 83 persons being the total number of killed and injured amounted to in 1876 there were 41.531 miners employed, and 209 accissions were killed, and the total number of killed and an amounted to 225. In alluvial mining there were during the sufficiency of the period is persons were killed, and the total number of killed and immonted to 225. In alluvial mining there were during the grilfewer men killed and 20 fewer injured than in 1875, and stilled and 22 fewer injured than in 1874; in quartz mining set 17 fewer killed and 27 fewer injured than in 1875, and 28 billed and 53 fewer injured than in 1874; 31 of the fatal acciousned to men engaged in alluvial mining, and 24 to men end and 43 below the surface; 42 of the killed were Euromills were Chiamen. More than one-half of the killed were leaves the surface of the surface of the killed were leaves allow, who left 87 children. The reduction in the number slats is stributed to the exercise of greater precaution in the grafines since the passing of the Regulation of Mines in 1873.

a 1873. dispector is well justified in congratulating himself improvement shown. Although the number of miners in 1876, as compared with the preceding year, was rely 25 per cent., the reduction in the number of killed hely 25 per cent. the reduction in the number of killed and 10 37 per cent. and in the number of injured to 21 6 per the data were 1-15 per thousand of the mean number of minimes employed during the year, and of quartz miners perhousand. In other words, one death occurred in every minimes and one in every 608 men ped in quartz mining. The average death rate per thousand of these of miners was 1-32 per thousand, or one death to every miss. This is not so high a proportion of fatal casualties as allown in the latest return relating to British metalliferous and miss, so that the Victorians have good reason to be thankful, accoragement to endeavour to secure equal safety in future.

WATER SUPPLY. - Messrs Le Grand and Sutcliffe, arteleginers, have prepared the following particulars of large of water from the chalk within a short distance of London. thurock, in Esex, about 19 miles from London, the Tunsturrock, in Essex, about 19 miles from London, the Tun-chat 80ft. deep, 220 000 gallons of pure and clear water per libours. At Messrs, Lawrence and Wimble's Cement Works, set, one 5 inch tube well yields 60,000 gallons per day. The sile supply, therefore, of these three wells is 280,000 gallons for Decut was under 1001. each. Hence for less than 3001. mit daily supply of 280,000 gallons have been obtained. The Wallons required under the Board of Works scheme can, may be obtained at an outlay of about 90002. In the case of upplies the tube wells should be coupled together by hori-mains, so that one pump draws from several wells. The mains to that one pump draws from several wells. hand to have been regularly pumped for about two years, the apply shows no signs of diminution.

kame roe Water.—The process of boring through the varies and so the New Red Sandstone formation, to the lower or absaing bunters at Stafford, for the purpose of obtaining a supply for the town, is being successfully carried on. The main and the surface of the summer o G FOR WATER.—The process of boring through the varielanght to Stafford by gravitation, as the water issuing from ble beds in that neighbourhood was of excellent quality and hoppy could be obtained. But the Town Council of Stafford, any from economical motives shows to endeavour to obtain

the 897.15

THE COPPER TRADE. Stocks in Europe:— Chili ores and regulus, Liverpool & Swansea (equal to fine). Chili bars in Liverpool Chili ingots in Liverpool ... Ditto Swansea Chili Ingots in Liverpool Ditto Swansea Foreign copper (chiefly Australian) in London Ditto ditto landing English copper in London Chili bars and ingots and Barilla in Havre. Other copper in Havre Afloat and chartered from Chili to Europe (advised by mail):— Ores and regulus (equal to fine). Bars and ingots Afloat from Australia (advised by mail):— Fine copper 7,924 850 = 31,248 2,135 2,253 = 4,388 Fine copper Afloat and chartered from Chilito Europe (advised by cable) :— Fine copper 2,600

Price of bars, 67l. 10s.; Wailaroo, 80l.; English tough, 72l.

Leadenhall-street, Sept. 1.

We have to report a deal's We have to report a decline of 30s. per ton in the value of Chili bars during the past fortnight, in which period about 1500 tons changed hands at 694. to 671. 10s. per ton. On the 27th inst. 700 tons Peruvian ore here sold at 13s. 1½d. per unit, and on the 28th 2379 tons foreign ore at Swanses, average produce 12½ per cent. realised by tender 11s. 10½d. per unit. Cape ore selling at 12s. 7d. per unit. Chili copper charters for the first half of this month were 1400 tons, consisting of 755 tons bars, and 350 tons ore and regulus for England, and 360 tons bars for the Content. The market to day is quiet at 67t. 10s. for good ordinary brands, the quotations for ore and regulus being quite nominal Arrivals here during the fortnight of West Coast, 8. A., produce: —Iberta from Valparaiso, 716 tons bars, 115 tons ingots: Illimani, from Valparaiso, 968 tons bars, 45 tons ingots. At Swanses, Aipla, from Carrizal, 575 tons regulus: Eta, from Carrizal, 803 tons regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at —

Ores. Regulus. Bars. Ingots. Barilla,

Liverpool 1223 2 81 11,287 — 10

Evaluation of the content of the co

Liverpool, Aug. 33.

Chili bars declined 2l. in the month, and other descriptions, excepting Wallaroo, are proportionately lower. For manufactured there is no demand, and in yellow metal but little doing. The present stock of copper is the largest held in the past twelve months. The imports to end of July, according to Government returns, show a very heavy increase over the past five year, whilst exports are very slightly above those of 1875-76. With the present very limited demand present prices can hardly be maintained. We subjoin our usual monthly statistics. The imports of copper into England for the first seven months of the following years were—1873, 41,895 tons; 1874, 48,995 tons; 1875, 48,510 tons; 1876, 49,485 tons; 1873, 49,485 tons. The exports for the same periods were—1873, 25,645 tons; 1874, 29,250 tons. The position from Sept. 1, 1876, to Sept. 1, 1877, 1871, was as follows:

Stock including afoat Price.

Stock on hand. and chartered.

	P	rice		Btoc	k on har		chartered.
****						Advised	by mail only
1876—September 1 £	72	0	0	Tons	24,417	Tons	30,548
October 1	73	0	0	**********	24,879	************	31,679
November 1	76	10	0	*********	25,740	************	33,476
December 1	76	0	0	***********	25,803	*** * ******	31,623
1877-January 1	76	10	0	**********	26,530	***********	84,226
February 1	73	0	0	***********	26,518	************	36,032
March 1	71	0	0		28,461	************	36,047
April 1	71	0	0	***************************************	28,563	***********	36,833
May 1	69	0	0	**********	29,585	*************	35,968
June 1	69	0	0	***********		***********	34.844
July 1	69		0	**********	29,523	************	35.578
August 1	69	0	0	***********	29,893	***********	01.510
September 1	67	0	0	***********	81,004	*********	
nd the comparative position	s al	the				ast four y	ears with th

present:—	Pri	ce.			Stock.	and	cluding afloat l chartered. by mail only	
1873-September 1 £	84	0	0	Tons	29,983	Tons		
	78			**********	26,852			
1875-September 1	83	0	0	************	23,023		32, 42	
1876-September 1	72	0	0	********	24,417	*********	20,543	
1877-September 1	67	0	0		31,004	***********	35,437	
The exports from the West Co	ast	to.	Ju	ne 30 were	24,404 1	ons, agair	st 25,614 ton	8
in 1876. The charters to Aug.	31	wer	e 2	8,400 tons,	against	31,300 ton	a in 1876.	
Leadenhall-street, London, Se	ept.	6.	_	— н	ENRY R	OGERS, 80.	NB, AND CO.	

For the first half of the past month values were kept steady, Coilibars being quoted 68t. 16s.; Waliaroo, 80t. 10s.; Burra 75t. 10s., with but little business passing; later, however, prices gave way, and we now quote Chilibars 67t. to 67t. 10s.; Burra, 73t. 10s.; Waliaroo being held for 8 t. English, dult, tough 73t.; manufactured 79t. to 80t. The charters from the West Coast for the last 14 days of August were advised as 1900 tons. The imports and exports for seven mouths, January to July, were, by the returns of the Board of Trade-

	IMPORTS.	1877.		1870.		1870.	
	OreTons	57,478		39,711		27,961	
	Regulus	20,7:9		17,815		20,169	
	CopperEXPORTS.	24,978	********	22,437	********	26,083	
	Foreign raw	8,597	********	9,423		8,238	
	English raw	6,060	*******	6,880	*******	5,830	
	Manufactured, including yellow metal and brass.	16,670	******	13,185	********	14,710	
20	ndon, Sept. 2.			FRE	NCH A	ND SMIT	B

THE TIN TRADE.

Notwithstanding a good demand for consumption, our tin market has the month shown symptoms of increased weakness. The downward tendency has made durther progress, and a slight rally towards the end of the month has only brought out more selers. Looking at the continued excessive supplies from Australia, a further decline in prices seems highly probable, and under these circumstances we would strongly advise holders to meet the market freely Experience must ere now have taught them that any attempt to bring about a rise does but lead to disappointment. Our market closes flat again. Banca has been in good demand, the price receding from 41 fl. to 40 fl. Holders now ask 40½ fl. without, however, making any progress at this figure. Several contracts ex September sale canaged hands at 40 fl. Billiton was pressed for sale in the beginning of the mouth, the price quickly receding from 39½ fl. to 38 fl. Both consumers and "bear" operators bought freely at the latter figure, which has made the price advance to 38½ fl., whereat there are, however, sellers only. 10,000 peculs Billiton, offered in public sale at Batavia on 18th inst., fetched the average price of 42 33 fl., costing to sell here about 38½ fl. by stamer. Next sale comprising the same quantity will be held on 0ct. 8. The position of Banca tin in Holland on Aug. 31, according to the official returns of the Dutch Trading Company, was— Notwithstanding a good demand for consumption, our tin market

					1875.	
Import in August	1,052	*******	17,469		8,776	
Total eight months			72,691		55,913	
Deliveries in August	18, 41		18,300	*******	16,390	
Total eight months			81,875	******	94,104	
Stock second-hand			24,781		12,300	
Unsold stock	46,260		57,927		81,726	
Total stock			82.708		97,026	
AfloatPeculs Statement of Billiton:-			3,400		19,050	
Import in AugustSlabs	6,200		17,400		5,500	
Total eight months	77.744	********	71,479		56,202	
Deliveries in August					5,993	
Total eight months						
Stock	4 - 171		36,-81	*******	27,353	
AfloatPeculs	14,000		13,000	******	17.000	
Quotation) Banca				*******	52 fl.	
Aug. 31 Billiton	381/4				49	

ioro, exhibit—A decrease of the import for August of 883 tons; an increase of the import for the eight months of 1526 tons; a decrease of the deliveries for August of 38 tons; an increase of the deliveries for the eight months of 200 tons; an increase of the stock second hand of 581 tons; a decrease of the unsold stock of 365 tons; an increase of the total stock of 166 tons; an increase of the total stock of 166 tons; a decline of the quotation of Banca of 56, per ton. The Government returns for the month of June are;— Billiton rt for Au

	-		Jui	10.						nths.	
	1877		1874	3,	1875		1877.	1	1876.	1	875.
Germany Tons	312		318		325	********	15 5	*****	1632		2114 8
England	5		19	*****	52	********	179		29	*****	333
Beigium	143		267		166	********	934		94 1		840
France	41	*****	lät		44	*********	351		256		228
Hamburg	32		36	*****	29	*********	191		196		211
United States	-			*****	33	**********	55		17		33
Other countries	127	*****	140	*****	58	*********	260	*****	190	*****	345
Total					707	Ei	3525 BELIE	IG A	8260 ND I	IAVE	1034 LAA

Straits is selling at 65l., and Australian at 63l. 15s. to 64l., showing Strates is setting at 0.05, and August. At these prices sellers d to be 3.5 whether a sufficient supply can be obtained from the

rocks without great expense in pumping, and, secondly, whether Holland 8 0 tons Banca and Billiton were delivered. The Dutch Trading Company water so obtained will be free from the deteriorating effects of the slabs Banca and 3500 Billiton will be offered. Below we give our usual statistics and slabs Banca and 3500 Billiton will be offered. Below we give our usual statistics and slabs Banca and 3500 Billiton will be offered.

	1877.		1877.		1870.		1875.
	Aug. 1				Sept. 1		Sept 1.
Foreign in LondonTons	9,609		10,074	***	7,730		5,717
Banca in Holland			915		774		385
Billiton in Holland	1,605		1,500		1,146		855
Afficiat for Europe, Straits, advised by mail							
and wire	70		makes.	.42	550		515
Affoat, Australian ditto	2,300		1,850		1,500	***	1,450
Affoat, Billiton	800		800	***	800		1.062
Banca in Trading Company's hands	1,413				1,810		2,649
Banca afloat, by sailing vessels	75	***	70	***	210	***	1, 90
Total	16.854		16.654		14.520		13.823
Sept. 6.	,						SMITH.

THE COAL TRADE.

Mr. J. R. Scott, the Registrar of the London Coal Market, has pub-716 lished the following statistics of imports of coals into the port and

district of London by	y sea, railway	, and canal during August,	1877	:-
Newcastle	ps. Tons. 121,177 17,316 6,103 1,356 29,268 2,709 2,336 2,824 1,180 1,225	London & North-Western, 16 Great Northern	18,809 16,198 12,179 14,885 8,366	18 13 13 18
Total	239,473	Total	4,284 4,358	13
Comp	arative States	nent, 1876 and 1877.		
By Sea. 61 Jan. 1 to Aug. 31, 1876 3 Jan. 1 to Aug. 31, 1877 3		By Railway and Canal. To Jan. 1 to Aug. 31, 1877 3,39 Jan. 1 to Aug. 31, 1876 3,26	0ns. 1,506 1,909	0.0
Decrease-1877	205 115,496	Increase—1877 12	9,59;	0
Sea-borne coal exported to the coast. Ditto, sent beyond limblitto, by canal and inla Railway borne coal exforeign parts, or the Ditto, by canal and inla Railway borne coal brought. Total quantity of coal during August, 1877. Ditto, August, 1879.	sing in transitu i to British pose its by railway and navigation ported to Briti soast and navigation into port and ev conveyed beyon	through district	26,76	3 3 9 1
Total distribution of coa	al from January	nent, 1876 and 1877. 1 to Aug. 31, 1876	846,449 839,.87	1
Decrease in the present	year		7,162	2
Less decrease by sea	rted by railway	Statement. and canal during the 129,597 115,496=	14,101 7,162	
Total increase in trade	within London	district during present year	21,26	3

FOREIGN MINING AND METALLURGY.

FOREIGN MINING AND METALLURGY.

The Chambers of Commerce of Normandy have been discussing the treaties of commerce question, and have invited the French Government to suspend all negociations upon the subject until a general tariff has been voted by the French Chambers. The conference also suggested that the treaty of commerce expiring June 30, 1877, should be provisionally extended until December 31, 1878, and further proposed that a Parliamentary enquiry should take place into the conditions of production in which French industry is at present placed, as well as into the influence and results of the economic regime now in force, and finally into the modifications which it may be advisable to introduce into customs tariffs. It was also recommended that in all future international treaties the principle of specific duties should be substituted for ad calorem duties. M. Pouyer Quertier presided over the conference. It would appear from statistics collected by the committee of French forgemasters that the metallurgical production of France for the first sux months of this year exhibited a sensible advance, as compared with the corresponding production of the corresponding period of 1876. Consumption would thus seem to have increased; prices alone remain unsatisfactory. The crisis is probably little by little changing into a crisis of prices. In the East of France refining pig is now quoted at 21. 9s. 6d. to 21. 10s. 4d. per ton. At Paris iron is selling at about 7l. 12s. per ton. In connection with the approaching Universal Exhibition at Paris it may be noted that M.M. Eiffel and Co. have obtained a contract for the construction of a building to be appropriated to the use of the Municipality of Paris; the amount of this contract is 17,200l.

A Liége report on the Belgian metallurgical trades says that the Cockerill Works in that neighbourhood have orders in hand sufficient to keep them employed for several months to come; and as a portion of the contracts are for quick delivery, it has been neces-

cient to keep them employed for several months to come; and as a portion of the contracts are for quick delivery, it has been neces-sary to re-light some of the furnaces which had been previously blown out, so that at present four furnaces are engaged on Bessemer steel. These works are amongst the few which have profited by the war in the East of Europe. An order has recently been bestowed upon them for 5000 tons of steel ratis for Roumania on Russian account, to be delivered in four weeks. Important orders for steel rails on Belgian State account have also been obtained for the same establishment, and in the Bessemer department there is, consequently, an amount of activity which has been absent from the other

establishment, and in the bessemer department there is, consequently, an amount of activity which has been absent from the other departments for a long time past. On the whole, however, the struggle for existence of the iron industry in the district is not less severe than elsewhere. Speaking generally, the workmen are employed only four days per week, and several establishments on the banks of the Maas are entirely closed.

There has not been much business in copper at Paris, and prices have remained without change. Chilian in bars has made 73L; ditto ordinary descriptions, 71L., ditto in ingots, 74L 10s.; English best selected, 76L; and pure Corocoro minerals, 74L per ton. The aspect of the German copper markets has not materially varied; the demand has remained mederate, and price shave not improved. There has not been much activity in tin at Paris, and prices have been quiet, and have been rather tending downwards. There have been quiet, and have been rather tending downwards. There have been few transactions in lead at Paris, and prices have remained without change. The German lead markets have been quiet, and prices have shown some little weakness. The French zinc trade has presented few points of inter-st; at Marseill's relied Vieille Montagne zinc has remained at 27L 4s, per ton. The German zinc markets have been firm, but without much doing upon them.

The Belgian iron trade has remained in much the same state upon the whole—in other words the market has exhibited no increase

The Belgian iron trade has remained in much the same state upon the whole—in other words, the market has exhibited no increase of animation. The market upon which contracts for locomotives have been recently let are a proof of this. The cause of the unprecedently low prices for locomotives now prevailing in Belgium would appear to be the fact that certain works being short of employment, and desiring to employ their stiffs, have been making pieces or portions of engines in advance, and when an adjulication takes also managing directors or managing partners esgrily avail. takes place managing directors or managing partners eagerly avail thems: Ives of the occasion to recover the often considerable capitals which they have set fast. The Willebroeck Construction and Workwhich they have set fast. The Willebroeck Construction and Workshops Company has concluded a contract for the construction of 23k miles of railway in Upper Italy—from Settimo to Rivarolo—the contract including permanent way, rails, and strtions, but not including rolling stock. In connection with this affair it appears that an order for 2500 tons of rails has gone to Barrow, England. The fish-plates and bolts are to be made in Belgium. The Willebroeck Company has reserved to itself the construction of the turntables, crossings, and iron bridges required; the prices at which all this work is to be done are said to be fairly remunerative. Apropos of Italian matters, we may add that the management of the Upper

Italy railways has submitted to the Italian Minister of Public Works the plans for five iron viaducts for the Pontobba line; a contract for these viaducts has not yet been let. The Meuse Construction Workshops have just obtained from the Belgian Government tion Workshops have just obtained from the Belgian Government an order for two marine boilers at a cost of 2900l. A steam tramway motor, constructed by the Belgian Colliery and Metallurgical Company, is now regularly at work upon the Brussels and Uccle line, and seems to give satisfaction. It appears from official returns that in the first seven months of this year the imports, minerals and limailles, into Belgium amounted to 409,000 tons, as compared with 414,000 tons in the corresponding period of 1876, and 510,800 tons in the corresponding period of 1875. Rough pig and old iron were imported into Belgium in the first seven months of this year to the extent of 112,000 tons, as compared with 123,000 tons in the corresponding period of 1876, and 86,000 tons in the corresponding period of 1875. The exports of minerals and limailles from Belgium period of 1875. corresponding period of 1876, and 86,000 tons in the corresponding period of 1875. The exports of minerals and limailles from Belgium in the first seven months of this year amounted to 105,000 tons, as compared with 87,000 tons in the corresponding period of 1876, and 93,000 tons in the corresponding period of 1875. The exports of iron wire, rails, plates, &c., from Belgium in the first seven months of this year were 109,200 tons, against 116,100 tons in the corresponding period of 1876, and 119,600 tons in the corresponding period of 1876.

period of 1875.

The only change in the French coal trade appears to be the fact that everyone is now a week nearer winter; there is little else to say. At present the arrivals of coal at Paris have been upon a comparatively moderate scale, and winter supplies have scarcely commenced. There are no transport difficulties to fear this year, and intending purchasers are accordingly not in any haste to give out their orders. Taking the canals of the Nord upon the whole, more boats are now being loaded than are being unloaded. In the basin of the Loire the situation remains unchanged.

The imports of coal into Belgium in the first seven months of this year are shown by official returns just to have been 382 300.

year are shown by official returns just issued to have been 362,300 tons, against 428,300 tons in the corresponding period of 1876, and 375,000 tons in the corresponding period of 1875. The imports of coke in the first seven months of this year were 13,800 tons, against 15,000 tons in the corresponding period of 1875, and 9000 tons in the corresponding period of 1875, and 9000 tons in the corresponding period of 1875, representations of the seven months of this year to 1,763,000 tons, against 2,108,000 tons in the corresponding region of 1875, and 9000 tons. gium declined in the first seven months of this year to 1,765,000 tons, against 2,108,000 tons in the corresponding period of 1876, and 2,279,000 tors in the corresponding period of 1875. Coke was exported from Belgium in the first seven months of this year to the extent of 316,000 tons, as compared with 336,000 tons in the corresponding period of 1876, and 412,000 tons in the corresponding period of 1875. One reason why Belgian coal is finding less demand in France is the fact that it has now to contend with American competition to some little extent. The French General Transationing Company for instance in power using American coal atlantic Company, for instance, is now using American coal.

Original Correspondence.

RICHMOND COMPANY.

SIR,-Your correspondent, "Anglo-Californian," states that the Str.—Your correspondent, "Anglo-Californian," states that the decision against the Richmond in the recent suit was "a forgone conclusion to anyone who knew anything of the mining interest of Nevada," and as he admits that "no parallel can be drawn between the Comstock and the Ruby Hill, the formation being totally dissimilar," it is evident that the wide lode theory which may be applicable to the one has no foundation in the other, and that the "foregone conclusion" as to the adverse verdict was due to the anticipated failure in justice in deflance of "law and facts."

The masterly argument of Mr. Wilson, the Richmond counsel, was unanswered, and is unanswered. He established the facts that the Richmond location was older than the oldest of the Eurelys con-

unanswered, and is unanswerable. He established the facts that the Richmond location was older than the oldest of the Eureka companies—the Champion, which, though its patent dates a few months earlier than the Richmond, the location of the latter had the presedence by six months, and in the patent is based on the location which it seals and confirms. Priority in a location so guarded cuts out all subsequent location, clashing privileges even though patented. The Eureka Company's other patents are all of recent date, and being subsequent to the Act of Congress in 1872, which requires that the end lines of locations shall be parallel, the patents in question are void because this condition was not fulfilled.

The Act of Congress of July, 1866, conferred extraordinary privileges in respect to the right to follow lodes, with their dips, spurs, and angles, wherever they might go, irrespective of the surface locations. The Act of May 10, 1872, introduced a different system, limiting the lode-right to boundaries within the extension of the end lines of locations, and making the surface location of primary import-

lines of locations, and making the surface location of primary importance. The supreme strength of the Richmond case consists in the fact that it holds its title under the Act of 1866, and can follow its lode to the exclusion of its neighbour, the Champion location, which was of six months later date; and, even if the latter had been the earliest, it could only have disputed the Richmond right by tracing a connection all the way from its (the Champion) ore body up to the advanced lode developed by the Richmond, which has never been done, on the only side open to the Eureka Company, they being for ever barred by the compromise agreement entered into with the Richmond on June 16, 1873, from crossing to the west of that line between the defined points, which line also effectually bars any extension of the oblique end line of the Champion.

The wide lade theory set up was completely developed in the complete of the champion.

The wide lode theory set up was completely demolished by the evidence of the Richmond experts; but if it could be established it would not help the Eureka Company to oust the Richmond, as the oldest location, from claiming the prior advantages of the "ledge," whether the fissure vein they were content to claim is the al embracing ledge they would have the right to claim. G. E. Sept. 4.

NEW QUEBRADA COMPANY.

NEW QUEBRADA COMPANY.

Sir,—Having lately returned from the West Indies, I have been surprised to hear that the stock of the above company had fallen from close upon par, a price to which it had attained last year, down to less than half, and, knowing thoroughly as I do the value of the property owned by the company, I was at a loss to understand the reason for the fall, for I am confident that with the facilities of transport for the ores afforded by the railway now near completion, the shares ought, at the most moderate estimate, tobe fully worth par in these days of low dividends.

From 1865 to 1869 I was employed by the New Quebrada Company, and have, therefore, an intimate knowledge of the mines and the property generally, and, as I am not a shareholder or in any way connected now with the enterprise, my remarks may be regarded as perfectly unprejudiced. In looking for a cause for the late depression, the only one I can discover is the report made by Mr. Darlington in April last. I have a copy now before me, I will not take up your space with a controversy upon any of Mr. Darlington's facts or estimates, although there are several with which it is difficult to agree entirely. I will rather endeavour to see if there is any cult to agree entirely. I will rather endeavour to see if there is any reason why, upon the issue of that report, the shareholders should have sacrified their property by recklessly selling their shares for any price offered them, as I have been told some very large holders did.

Mr. Darlington says that at a "rough estimation" only 80,000 ton Mr. Darlington says that at a "rough estimation" only 80,000 tons of ore "are in reserve that is available for extraction," and probably some of the shareholders at once jumped to the idea that this was all the return they could expect to get, and, as 80,000 tons of ore ought to realise about sufficient to pay back half the Quebrada capital, they sold their shares at once for about half of what they had paid for them. But, although atfirst sight the report gives this idea, I do not think that it could have been the meaning of the writer. With regard to the ruby ore, the report says, "10,000 tons are available, founded on a general view of the various places." Now, from the very cautious way in which the whole report has been

company possessed. But the report says that the "Titiara Mine," 2300 yards distant from the "Aroa Mine," may or may not be on

company possessed. But the report says that the "Titiara Mine," 2300 yards distant from the "Aroa Mine," may or may not be on the same lode, and the probabilities are, looking to the similarity in bearing and inclination and quality of the mineral where discovered at the two places, that the opened mines are on one and the same lode. Further the report says that "it must be remembered that the Aroa Lode has only been effectively wrought for the trifling length of 350 feet, which length has undoubtedly afforded a large quantity of ore," and Mr. Darlington says that he "has disregarded hypothetical and extravagant calculations of the value of the lode between Aroa and Titiara," but I think his report, if rightly read, fully bears out every previous statement of the extent of the deposits of ore owned by the New Quebrada Company.

With regard to the value of the ore, I am told that the cargoes now arriving are poor in quality, and I can only surmise that the ores now coming to hand are those which were most readily obtainable, for I am confident that as new ground is opened up the ore will improve. But ore of even 12 or 14 per cent., sent down in yearly quantities equal to the contract with the railway company, will, if the expenses of the establishment are properly controlled, leave profit sufficient to pay 8 per cent. on the Quebrada share capital, after paying the interest due on debentures; but it is beyond dispute that as new ground is opened up richer ores must be met with.

It is universally allowed that the first adventurers at the Aroa Mines only sent down the richer classes of ore; they could not have carried the yellow ore down to the coast on animals with any margin of profit, and as everyone knows that some 40 years ago large cargoes of ore were sent home by the English company then working the mines, it is certain that only rich ores were extracted from the mine. I have no figures to show the quantity of ore sent home in those days, but at Punta Brava (the proper shipping port for the New Quebrada Co very numerous, and that it is thus beyond dispute that the ores must improve af new ground is opened up. If the cost of the car-riage by the Bolivar Railway be reduced, as no doubt it will, there is even with 13 per cent. ore an ample margin of profit for both

concerns.

There is plenty of firewood easily available on either side of the line, and when this has been worked too far off there is coal in the province that can be put in the port of Tucacas at a moderate rate. I shall be glad of a further opportunity of explaining the value of the property owned by the New Quebrada Company.

E. D. Mathews, Assoc. Inst. C.E.

Mildengy Chambers, Unique court, Sant 7.

Mildmay Chambers, Union-court, Sept. 7

NEW QUEBRADA COMPANY.

SIR,-Since the publication of Mr. Darlington's report upon the mines of this company I have received numerous communications from many members of the company. Nearly all of them appear to have drawn the conclusion that the writer of the report meant to convey the impression that the rich ores were mainly, if not exhausted, and that the great mass of the ore was of such a wholly, exhausted, and that the great mass of the ore was of such a low percentage that it will not pay to transport to this country. Undoubtedly Mr. Darlington has framed his report in much less glowing terms than is usually adopted in mining reports, and in his anxiety to avoid high colouring has, perhaps, fallen into the op-posite extreme, and considering the condition of the mines, owing to the neglect of the present management, who appear after all these wears to have done absolutely nothing to develue or work. these years to have done absolutely nothing to develope or work them, it is not to be wondered that his disappointment made him speak less of the enormous magnitude and richness of the deposit than of the miserable condition they exhibit. Still throughout his careful cantious report nowhere can I find anything which disputes the high value which has always been given to the mines. That enormous quantities of rich copper ores have been taken from the principle will sutherticated and that vastly greater amounts remain mine is well authenticated, and that vastly greater amounts remain

mine is well authenticated, and that vastly greater amounts remain is equally undoubted.

I have at this moment before me a copy of a bundle of letters written in 1839, by one of the trustees of the Bolivar Mining Association to his co-trustees in London. This gentleman, one of the respected members of the Stock Exchange of that day, had been deputed to go to Venezuela, and take possession of the property and mines on behalf of the association. The latter had for some time been worked by Mesers. Ackers and Greenleaves, of Liverpool, for their own account, and there appears to have been some difficulty in settling what ores should belong to them up to the time of their giving up the mines. Prior to his arrival there they had been set on fire—it was believed by some of the workmen who had disputes with Mr. Ackers. The greater part of the upper old levels were destroyed and fell in, and I believe they have never since then been with Mr. Ackers. The greater part of the upper old levels were destroyed and fell in, and I believe they have never since then been re-opened. The value of the ores lost by the fire was such that Messrs. Ackers and Co. wished to claim the right of re-opening at their own expense all the workings and levels which the fire had destroyed. This was opposed by the Bolivar Association and afterwish destroyed.

destroyed. This was opposed by the Bolivar Association, and after much quarrelling they remained and remain unopened to this day. The following two extracts from one of the letters will give some idea of the value of the ore which was then in sight, and ready to be brought out of the mine:—"The fire, I consider, has operated rather in our favour, as just at that time they had commenced to rick out the gray ore and would have removed a great deal before rather in our rayour, as just at that the trey had commended to pick out the grey ore, and would have removed a great deal before we arrived. Mr. Seyers declares it was 100,000% out of their pockets. The question, therefore, of the proprietorship of the ores in the mine is consequently very important to both parties, and in either case I dare say we shall be losers by the dispute. Trevaskie (the captain of the mine) told me that he had not blasted any of the grey ore since the opening of the level, but I have heard differently; if with all these disputes we commend this discouraging still we will all these disputes we commence it is discouraging; still, we will have the good fortune to begin with rich ores, which will give im-

nave the good fortune to begin with rich ores, which will give immediate and great results."

In another letter, speaking of the dispute, he says:—"You will not be surprised at their pertinacity in defending the first point when I inform you that 61.000 tons of yellow ore of 19 per cent., and 8500 tons of grey ore of 30 to 34 per cent. were shut up in the mine when the first took place on Oct. 2 and prevented them from removing any of it."

Taking Mr. Darlington's estimate that 12 units of ore are required to part the express of bringing it to market, still here we have a

Taking Mr. Darlington's estimate that 12 units of ore are required to pay the expense of bringing it to market, still here we have a statement that ore was shutup and still lies there ready to be taken out, which at the present price would actually yield, after paying all expenses, nearly 500.000% of profit. The workings were then carried on from levels above the Santa Catalina and Santa Barbara. If the company had leid out a little of the large sums spent during the last five years in .searching for and opening up these levels Mr. Darlington would have made a totally different report; still, a few months search and a few hundred pounds might do the whole. If I did not take up much space in your Journal I could give you extracts showing the estimated value of the ores in the floors which tracts showing the estimated value of the ores in the floors which were about to be calcined and dispatched to market meantime. I think the excerpt above should convince your correspondent that there is no need to speak in the way he does. A SHAREHOLDER.

[For remainder of Original Correspondence see this day's Supplement.]

of ore "are in reserve that is available for extraction," and probably some of the shareholders at once jumped to the idea that this was all the return they could expect to get, and, as 80,000 tons of ore ought to realise about sufficient to pay back half the Quebrada capital, they sold their shares at once for about half of what they had paid for them. But, although at first sight the report gives this idea, I do not think that it could have been the meaning of the writer. With regard to the ruby ore, the report says, "10,000 tons are available, founded on a general view of the various places." Now, from the very cautious way in which the whole report has been written, one is tempted to speculate whether it is not just as likely that there are 20,000 tons.

Then the report only appears to deal with the length of known workings from north to south 350 feet, and possibly it was thought by some that this length was all the metalliferous ground that the THE CARON LEAD MINE, -A company has recently been formed,

ming, and the management will be entrusted to Mr. John Kin Llanidloes. It is estimated that sales of lead will begin in

THE SCOTCH MINING SHARE MARKET-WEEKLY REN AND LIST OF PRICES.

THE SCOTCH MINING SHARE MARKET—WEEKLY REN

AND LIST OF PRICES.

During the past week the market has been very idle. The gen opinion, however, is still in favour of investments being malter traordinarily depessed prices. The large manufacturing trabe the United Kingdom cannot fail to be sensibly might the better state of affairs in Canada and the Sciaprored by provement the mineral markets will participate, and then read on the bably unequalied rebound in prices. In shares of iron and coal concern, all and (ordinary) are reduced 2s. 6d. per share on the bably unequalied rebound in prices. In shares of iron and coal concern, all and (ordinary) are reduced 2s. 6d. per share on the bably unequalied rebound in prices. In shares of iron and coal concern, all and (ordinary) are reduced 2s. 6d. per share on the same is all wint. 7s. 6d. just, original shares 35s. to 40s. The Oak Pits Colley medig at last dividends are maintained, will be 6½ per cent. on Arabon, nearly sea and Title 6 per cent. debentures are offered at 55. Bilboa and Alde and Title 6 per cent. debentures are offered at 55. Bilboa and Alde 7yaughan, A, 55½ to 55½ (ditto, B, 36½ (ditto,

(Limited).—Attention may be directed to the present price shares, as there can be no possible doubt of their being by cheapest dividend-paying stock now in the market for m any other properties, almost certain to pay large dividen-sequently have a considerable rise in price. At several pounds per-above the present prices they would be cheap, and the quotations that at can only be accounted for by the very exceptional state of the the fact that investors generally are quite unaware of the most the and soundness of the enterprise. The mine is improving every we sources are simply boundless.

SHOTTS IRON COMPANY.—At the annual meeting, on the report to be submitted by the directors for the past ye that the balance of profit, amounting to 57301, 16s, 5d, from the previous year has, with 62691. 3s. 7d, part of years' profits—together 12,0001.—been credited in reduction expenditure, and the balance of 33891, 8s. 8d. (less 42f, for the divided ference shares) is recommended, to be carried forward. The director SHOTTS IRON COMPANY.—At the annual meeting on ference shares) is recommended to be carried forward. The severing in the policy of improving and extending their works severing in the policy of trade, and it is satisfactory to find they so, pay the interest on the morgages and on the Bank advassam for depreciation, and still show a surplus.

pared for a revival of trade, and it is satisfactory to find they had been so, pay the interest on the morgages and on the Bank advances, since some for depreciation, and still show a surplus.

OMOA AND CEELAND IRON AND COAL COMPANY (Limit At the sixth ordinary meeting of this company the reports counts were adopted. The general opinion of those presents are successful to the surplus of the company that the company had got over its difficulties, and was it working condition to wait till the turn came in trade. The man hoped there would not again be any small loss on the working till improved, and there was no other loss could come on the company. We following extracts from the report:—"The directors regret there has been the coal trade, which has been more severely felt than in any year. The miners also were on strike for a period of nearly two mosts, will should be an expected to the severity of raising proportionally reduced. The directors loss for a director of the depression in trade. The forestore sowing to the severity of the depression in trade. The forestore same begot to advantage. There is, however, an improvement to reord business of the brickworks, and there is every reason to look for a coint green satisfactorily, 5000 tons being ready to sell (calcined and raw) shess can be got to advantage. There is, however, an improvement to reord business of the brickworks, and there is every reason to look for a coint of the depression in trade. The financies worth in the department. To meet the demand for workmen's houses in all, from which outlay a good return is expected. The financies wagon lease, which tails to be paid off by yearly installments.

GLOUCESTER WAGON COMPANY.—Great dissatisfaction we pressed at the annual meeting of shareholders at the proposal record of the capital of

GLOUCESTER WAGON COMPANY.—Great dissatisfaction was pressed at the annual meeting of shareholders at the proposal report (given in last week's Journal) to reduce the capital (10), fully paid up shares to 5l.—that is, to repay bl, on each. Also that no reduction is to be made on the shares having for the report and accounts, however, were adopted, and the director of the resolution reduction is to be made on the shares having for the report and accounts, however, were adopted, and the director was ever re-elected. A motion to reduce the remuneration of the director of three fourths. The Chairman stated that the company's wagons now of three fourths. The Chairman stated that the company's wagons now state. The reduced have been put into them in repairs. As a matter of fact the value of them will less than this, judging from the condition of trade. A profit was missing the specific which is satisfactory, though the amount made on each should be specified which is satisfactory, though the amount made on each should be specified which is satisfactory, though the amount made on each should be specified which is satisfactory, though the amount made on each should be specified which is satisfactory, though the amount made on each should be specified which is satisfactory, though the amount made on each should be specified which is satisfactory, though the three were only some other five manual to per cent. When they started there were only some other five manual to per cent. When they started there were only some other five manual three competing companies get the most of their capital by debuarding. Si 150, companies all struggling to live through this period of dependents.

When these competing companies get the most of their capital by debuarding the specified with the been paying 3 per cent., in order that it may now replace it will the been paying 3 per cent., in order that it may now replace it will that been paying 3 per cent., in order that it may now replace it will a constant the start and of the capital by d

raised at 4½ per cent.

WHITFORD MINES.—A company is projected to work this perty, extent of about 150 acres, about half-a-mile to the not the present great discovery at the Gorsedd and Merllyn Mines, thou present great discovery at the Gorsedd and Merllyn Mines, the present great discovery at the Gorsedd and Merllyn Mines, covering of mountain shale, and in every respect the same good conditions, being, moreover, in a direct line or channel from the his cal conditions, being, moreover, in a direct line or channel from the his Mines northward to the present Great Mines Mines, near Wrexham. If Mines northward to the present Great Mines allowed from the his level this property will proze as any that was ever worred in the let of the same worked since machinery was introduced. Filintahire mines I has not been worked since machinery was introduced. Filintahire mines and the level driven, over a mile long, and three min relations of the same of

PARRACOMBE MINES.—There is evidenly a disposition more attention to North Devonshire lead mines, and a new shortly to be introduced under this title. It is a silver-lead about four miles east of the Combmartin Mines, and very fa about four miles east of the Combmartin Mines, and very fa ably reported on. The sett is very extensive, with a good a difference of the lock. The locked discovered water. Adit levels can be driven on the course of the lock. one of which has been opened on, and about 10 ft. from the

stones of ore. The produce assayed was 1034 in 20 for lead, of 31 cwts. for silver.
OLT AND NUT COMPANY (Limited).—A first in-

symbol somes of ore. The protection of the prosignification of the p

make spuggers of the state of the state of the state of the state of this company referred to in last week's the meeting of this company referred to in last week's mere was some discussion about the quoted price of the hich was evidently considere I as representing exceptional last Now that the colliery may be considered free from 18000 and of the projects of screen containing the 13-ft, seam, which will be account of water it prospects are much better. The pro-nds to 5 acres, containing the 13-ft. seam, which will be nine months. Sandwell, the adjoining colliery, is raising per week, and selling the coal at the pit's mouth at 11s., ato increase the output to 1000 tons daily before long, the week's quotations, &c., of mining and metal shares quoted on

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- Park	16 10	rati (II.	my c	FIRE	J GRAND MACKET NAV Stock and Shane E	no kon
d Office	Bu	ldin	na. s	Stiel	J. GRANT MACLEAN, Stock and Share E.	TOKET.
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GREAT WESTERN COLLIERY COMPANY.

selfth ordinary general meeting of shareholders was held at an Thursday. There was a large attendance. Mr. WILLER-Inns presided, and, in moving the adoption of the report must, expressed regret at the absence of their Chairman [181], who had been seriously ill. He had written a letter, a be said that it was a matter of congratulation that the pit westigned and it analy remained for increased prices to be grain that it was a matter of congratulation that the pit gruipped, and it only remained for increased prices to be in the coal trade to warrant a greater output of coal. The then said that from what they heard on all hands many living down in Wales were losing money. They had ceres, from their nearness to the market, and having a new coal; but we amount there was to meet out of the revenue it was quite impresent state of trade that any such profits could be made as to pay which had to be met. He could assure the shareholders that all due does not not seen that the could assure the shareholders that all due does not not seen the could assure the shareholders that all due then protected. In considering a fine property like that of about that an immense amount of coal, and capability and proper appliances given to take advantage of the property, and get a large output it groperly.—Mr. Land seconded the adoption of the reports and

eds), proprietor of 145 shares, said that shares with 182, paid of 3. There was something wrong somewhere. He was told lery was a good property, but, if so, why did the shares come? He suggested that they should appoint some good men of sould then see where the leakage was. The e was coal in their fork that instead of borrowing money at heavy percentages? at the report be received, but not adopted.—Mr. WATKIS econded the amendment.

that the typot be received, but not adopted.—Mr. WATKIN 1) seconded the amendment.

Seconded the amendment.

Seconded the amendment.

Kelontypridd) moved that a committee, on a suggestion by Mr. atel to consider the matters in the report and their remedies, and ling to receive the report. (Hear, hear.) Iswan and Adams, Cardiff) said the course suggested, more or less, editectors. It would be as well if he stated their present posision of the superior of the stated their present posision of the superior of

I: It is very unsound now. — Mr. H. LEES: You say you could see than 250 tons a day from the Four feet seam? — Mr. BROWN: the feet seam? — Mr. BROWN: It me extremely if you go to any practical man, and show him the kings, and see if he says an.

yn Mines, nder the same geom the Tale exham. It is the best directly a main vela adit level, a the same a one is yet dipaying microvery was that had be bein of exhaust

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res, and give them mo

their ordinary shares, or more than 9l, for their preference shares.—Mr. IAGO DANIEL (Pontypridd) maintained that they could raise 500 tons a day from the 4-foct seam, instead of 250 tons.—Capt. DALE asked why coal had not been worked to a fuller extent?

Mr. Brown: If you can find a market, we can raise it. This is a new colliery, and you have to go into the market and try to obtain a connection. I think you will find that there is not much to complain of in the rate at which markets have been found. Yesterday we raised over 500 tons a day.—Mr. Regassid he understood the coal was not now sold in Cardiff, but in London.—Mr. INSER observed that Mr. Brown's statement differed from Mr. Bryant's statement.

After further discussion, the Ohalbana said the directors would be happy to meet a committee of shareholders, and confer with them, but the report should be adopted.—Mr. JEFFERY refused to sanction the adoption of the report.

Ultimately it was agreed that the accounts should be received, that the meeting be adjourned to Sept. 27, and that before deciding upon the adoption of the report a committee, consisting of the following gentlemen—confer with the directors:—Messrs, Jeffery (Leeds), Briscoe, Lees, Inskip, Spencer (Cardiff), J. E. Pric, and Ohristopher James.—The proceedings then terminated.

SOUTH TOLCARNE.—At a general meeting of adventurers, held at

SOUTH TOLCARNE.—At a general meeting of adventurers, held at the offices of the company, on Thursday (Mr. C. Clark in the chair), the financial statement for 16 weeks, after charging costs to July, showel a balance in favour of the mine of 229/. 10s. 10d. A call of 4s. per share was made. The committee of management were re-elected, and a vote of thanks given to the Chairman.

elected, and a vote of thanks given to the Chairman.

VAN RAILWAY.—The half-yearly meeting of shareholders was held at the board room of the Van Mines, on Aug. 28, when the chair was taken by Mr. W. Page; the vice-Chairman (Mr. A. R. Boughton-Knight) leaving after the directors' meeting with Captain Crewe-Read, R.N. Among these present were Messrs. John Allington, F. Hunt, Robert Oldrey, Wade-Grey, W. J. Lavington (secretary), and W. N. Swettenham (engineer). After some frivolous objections by Mr. Evan Powell, one of the engineers and an auditor of the company, a resolution to issue 3000l. 6 per cent. perpetual debenture stock was confirmed; a dividend of 7½ per cent. was declared; the retiring directors were re-elected, and Mr. F. Hunt appointed an auditor in the place of Mr. Powell. It was also moved that 100l. per annum from the time 5 per cent. had been declared be paid to the directors who had previously acted without remuneration.

DEEP MINING SHAFTS IN EUROPE.

DEEP MINING SHAFTS IN EUROPE.

Twenty years ago the deepest mining shafts in the world reached only about 2000 ft. below the surface. The very deepest, we believe, was a metalliferous mine in Hanover, which has been carried down to the depth of 2290 ft. The deepest perpendicular shaft to-day is the Adalbert shaft in a silver-lead mine in Prizibram, in Bohemia, which has reached a depth of 3280 ft. The attainment of that depth was made the occasion of a three days festival, and still further noticed by the striking off of a large number of commemorative silver medals of the value of a florin each. There is no record of the beginning of work on this mine, although its written history goes back to 1527. Quite recently an elegant commemorative volume has been written and printed, which is most interesting to those who have a taste for either the actualities or antiquities of mining industry. There are two other localities, however, where a greater depth has been reached than at the Adalbert shaft, but not in a perpendicular line. These are—1. The Rocksalt bore hole, near Sperenberg, not far from Berlin, which a few years ago had been bored to a depth of 4175 ft.—2. The coal mine of Viviers Remus, in Belgium, where the miners, by shaft sinking together with boring, have reached a total depth of 3542 ft. Turning from these two mines, no shaft in unbroken perpendicular line has as yet exceeded the depth of 3280 ft. Taking each singly, the deepest shafts in the world at the present moment group themselves according to the following order:—

1.—The already-mentioned Adalbert shaft, 3280 ft, deep. As the

following order:—

1.—The already-mentioned Adalbert shaft, 3280 ft. deep. As the top of this shaft is 1732 ft. above the sea level the bottom is, of

course, 1548 ft. below it.

course, 1548 ft. below it.

2.—Two shafts near Gilly, in Belgium, are sunk to the depth of 2847 ft. At this depth they were both connected by a horizontal drift, from there an exploring shaft is sunk to a further depth of 666 ft., and from there again a trial hole, 49 ft. in depth, is put down, so that the total depth reached is 3542 ft. As they did not in the bore-hole discover the sought for coal seam, they have returned to the shaft at the 2847-ft. level.

3.—The Eimgkerts shaft of the Lugauer Coal Mining Company, Rhenanis, Lugau, in the kingdom of Saxony, is 2653 ft. deep.

4.—The Sampson shaft of the Oberhartz Lead and Silver Mining Works, near St. Andreasberg. Hanover, has a depth of 2437 ft., is at

4.—The Sampson shaft of the Oberhartz Lead and Silver Mining Works, near St. Andreasberg, Hanover, has a depth of 2437 ft., is at present the deepest shaft of Prussian mining.

5.—The winding shaft of the Rosebridge Colliery, near Wigan, Lancashire, England, has a depth of 2458 ft. Coal is drawn from the "hanging on" at the 2418 ft. level; the time of the cage running this distance being 55 seconds; the winding rope has, therefore, an average speed of 44 ft. per second.

6.—A shaft at the coal mines of St. Luke, near St. Chaumont, in the Loire department. France, reaches 2253 ft.

6.—A shaft at the coal mines of St. Luke, near St. Chaumont, in the Loire department, France, reaches 2253 ft.
7.—The shaft of the Dunkirk Colliery, near Dunkinfield, Lancashire, is 2069 ft. deep, but the mining is prosecuted to a further depth of 755 ft. by shafts from the lower levels, making a total depth of the mine of 2824 ft.

8.—The deepest shaft of the collieries near Ronchamp, in France, is 1881 ft. A similar depth has been reached by the argentiferous mine near Kongsberg, in Norway. The mines belonging to the Roros Copper Works, in Norway, have worked to the depth of from 2540 ft. to 4270 ft. to 4270 ft.
9.—The Amalia shaft in the mine works near Schemnitz, in

Hungary, 1782 ft.

10.—The No. I Camphausen shaft, near Fishbach, in the department of the Saarbruck Collieries, has now reached the depth of 1650 ft., and may possibly become the deepest shaft in Prussian coal mining.

Although the depths to which the shafts enumerated have p trated into the interior of the earth in the art and practice of n ing may appear mighty, and may be an expressive witness of the great progress made in mining pursuits, yet, on the other hand, the above results may be considered insignificantly small when we compare them with the extent of the earth's crust and the diameter of the earth. The deepest bore-hole in the world is the artesian spring at Potsdam, in Missouri, which reaches a depth of 5500 ft.

following Reports were received too late for insertion in their proper place:-GLENROY.—R. Rows, Sept. 7: Telegram: The shaft sunk over 5 fms. below 16 60; lode 6 ft. wide, spar and blende forming on footwall face. The 25 south improving, and must be continued, ore dipping sonth nufer the level, from the present appearance not driven on this part of the lode. The 40 yielding lead

the co; node of t. wide, spar and bitned forming of notwail face. The 28 south interhing wrong somewhere, He was told sperty, but, if so, why did the shares come that they should appoint some good men of re the leakage was. The e was coal in their borrowing money at heavy percentages recived, but not adopte i.—Mr. WATKIN ment.

GOUTH TOLCARNE.—W. Rich, W. Hambly, Bept. 4: The 50, east of engine-shall the communication of the leakage was. The e was coal in their borrowing money at heavy percentages recived, but not adopte i.—Mr. WATKIN ment.

It is not the course of the lode, thereby proving the drivage of the course suggested, more or less, be as well if he stated their present positiff; said the course suggested, more or less, be as well if he stated their present positiff; said the course suggested to offer the only point that referred to him in what to a lower seam when they ought to have plits were sunk to the 4 ft. seam. They had to a lower seam when they ought to have plits were sunk to the 4 ft. seam. They had to a lower seam was 10,000. They were now life seven their principal winding pit was not the great bulk of the coal was 10 yard. It is seam was 10,000. They were now lings, to produce 1000 tons a day, natead imade sound by the present board by that will be completed to the coal was 10 yard. The produce 1000 tons a day, natead imade sound by the present board by that will be completed to the coal was 10 yard. The produce 1000 tons a day, natead imade sound by the present board by that will be completed to the people could.—Mr. Brown: It is not produce 1000 tons a day, natead imade sound by the present board by that will be completed to the productive. We have find the great bulk of the coal was 10 yard. The productive was a produce 1000 tons a day, natead in make sound by the present board by that will be completed to the productive. We have find the produce 1000 tons a day, natead in approved of what was done, and the different points at once. We have supplied a parcet of year points and the produc

shaft, producing saving work. We have made and fixed about half of the length of launders from the river to the water-wheel.

PRODUCTION OF METALS AND METALLIC ALLOYS.

PRODUCTION OF METALS AND METALLIC ALLOYS.

Some further improvements upon his several inventions connected with the production of metallic alloys have been patented by Mr. JOHN HOLLWAY, of Jeffrey's-square. One of the former inventions was for the manufacture of spiegeleisen or ferro-manganese; another for the utilisation of blue billy; and the present relates to the production of other metalliferous compounds, by a similar process. There appears to be very little in the invention so far as can be discovered from the specifications, which seem to have been drawn up by the inventor himself, and with insufficient knowledge of what such documents are intended to be—a discription of an invention, and not an undigested mass of laboratory notes and memoranda. It appears that one object of the invention is the formation of a compound metallic coke, containing oxide of chromium and oxide of iron, which coke when smelted will produce ferro-chromium or chromeisen. Another object is the formation of a compound metallic coke containing, in addition to oxides of iron and chromium, tallic coke containing, in addition to oxides of iron and chromium,

tallic coke containing, in addition to oxides of iron and chromium, substances containing manganese, for the production of an alloy of chromium, magnesium, and iron. These will serve as examples for otheralloys, which he intends to produce more easily than heretofore. It is very difficult, he thinks, if not impossible, to reduce chrome iron ores in the ordinary blast furnace, or by the ordinary methods; he, therefore, proposes to take chrome iron ore, adding thereto iron ore, if desired, with the fluxes necessary, together with sufficient coal or other carbonaceous materials, and bitumen, if necessary, to make a sound coke, pulverise or disintegrate and wash the ingredients that require to be so treated, and well mix the whole. The mixture when coked and smelted alone or with suitable metalliferous substances, and with or without ordinary coke, will be capable of substances, and with or without ordinary coke, will be capable of yielding ferro-chromium or chromeisen. To produce an alloy of chromium, magnesium, and iron he tikes substances containing manganes, chromium, and iron with the necessary fluxes if desired. together with sufficient coal, adding bitumen if necessary to make a sound coke, pulverise or disintegrate and wash such of the ingredients as require to be so treated, and well mix the whole. The mixture when coked and smelted alone, or with suitable metallifer-

ous substances, and with or without ordinary coke, will yield an aloy of chromium, magnesium, and iron.

The ingredients are to be varied according to the different characters and analyses of the metalliferous substances to be smelted with the metallic coke. Mr. Hollway considers that the cause of failure of similar efforts in the same direction has arisen from the attempt to get too much metal into the lumps prepared for smelting. He also remarks that the incredients heing in a pulserulant state. tailure of similar efforts in the same direction has arisen from the attempt to get too much metal into the lumps prepared for smelting. He also remarks that the ingredients being in a pulverulent state, objectionable constituents can be more easily removed by washing or other purifying processes—for example, ores cuntaining phosphorus, after being pulverised, can be washed to get rid of the fossil remains which are found in aqueous iron ore deposits, and these as well as other iron ores can, if desired, be treated with sulphurous or other acids for the purpose of further reducing the percentage of phosphorus, thus rendering it suitable for the manufacture of the better qualities of iron and steel. This pulverulent condition of metalliferous substances has heretofore been considered a mechanical difficulty; in order to overcome this many processes have been devised; in his process, however, this condition is an advantage, if not even a necessity. When non-coking coal or other carbonaceous material is used, or metalliferous substances which are reducible at a temperature which renders coking only partially or altogether unnece-sary, it will be advisable to mix the ingredients together, in a heated state preferred, and form them into blocks by pressure, taking care to use sufficient binding materials, particularly bitumen, in order that the blocks may hold together. These blocks may be baked and partially or wholly coked the coking and smelting will be completed in the furnace. completed in the furnace

PETROLEUM V. GAS.—The Romford Board of Health have taken PETROLEUM V. GAS.—The Romford Board of Health have taken definite steps to substitute petroleum for gas in the public streets by accepting at their last meeting the tender of Mr. Deitz to alter the public lamps according to his patent for burning oil, and at the same meeting they accepted the tender of Mr. E. Pertwee, a local purveyor, to supply oil for the lamps (white petroleum, 120°), at is. 2d. per gallon. There were six tenders presented, including those of the American Oil Light Company, and the Crown Lubricating Oil Company, and several other London firms. It was stated that the clerk has received applications from no less than 20 Town Councils and Local Boards for information as to the cost and modus operandiof substituting oil for gas in the public streets.

	LEAD ORES.	Purchasers. George Burr. J. Dinning.
3	COPPER ORES. Date. Mine. Tons. Price per ton. Sept. 6 - Parys Mountain 220 £ 1 1 0	Purchasers. St. Helen's Copper Co.

Mines.		Ton		Pi	ice.	- 1	Mines.	Tons.		rice	3.
Tellanear		78		€2	2	6	East Pool		£3	17	-
ditto	*************				10	6	ditto	20	1	3	- (
ditto	*************	. 73		2	19	0	ditto	18	4	0	- 1
ditto	***************************************			3	2	6	South Crofty		2	4	- 1
ditto	***************************************				13	6		59	2	6	1
ditto	000000000000	51			12	6		55	1	16	3
ditto	************	50	******		11	6	Levant		6	0	-
					14	6		54	6	15	
West Tolgu	9	10		3	19	0		49	6	6	
ditto	**********	12		0	13		3:44-	2		0	
ditto				4		6				18	
ditto					4		Carp Brea	28		13	
ditto	*********			7	6	6		26		10	
ditto		40		7	- 4	6		24			
ditto	***********	39	*****	4	11	6	Lillifreth			8	
West Seton		81		4	2	0		35	. 5	3	
ditto	***********	51	*****	4	1	6	West Basset			16	
ditto	***********	50		4	1	0	North Treakerby	37		17	
ditto					7	6	South Conductow	19	. 7	3	
ditto	404104104110				16	6	Poldice	16	. 1	10	
ditto	***********	38	100000	4	11	0	ditto		. 5	10	
ditto	***********	15		- 9	2	0	South Tolcarne		. 0	10	
East Pool .						0	Dolcoath			2	
		47	******		13	6	Wheal Unv			8	
ditto	*********	9.6	*****	0	12	0	Sedgman's Ore		-	10	
ditto	*********	00								40	
			3	ro:	AL	P	RODUCE.				
Mellanear.	4	40	£1	461	12	6	West Basset	. 41 £			
West Tolgu				275	14	0	North Treskerby	. 87	142		
West Seton				319	19	0	South Conductow	. 19	136		
East Pool .	9	0.7			16	6	Poldice	. 18	35	1	
South Crof	tar 1	80		381		6	South Tolcarne		8	10	
Levant	by 1	60			11	6	Dolcoath		66	0	
Carn Brea.	4	79			10	0	Wheal Uny		19	4	
		77			15	0			1	0	
Killifreth.		66	000	400	10	v	i bengman a ore .		_	-	
				0.0	10	-	1 Amount and annual				7
Average st	andard			80	19	U	Average produce	D4 9 0	48030	200	٠,
	Average p	rice I	per to	п.,,			Average produce	ava 2 0	. 19	-	rt
Quantity of	fore				2	027	Quantity of fine of	opper you rea	in ye	OM	
							£8297				

COMPANIES BY WHOM THE ORES WERE PURCHASED. | COMPANIES BY WHOM THE URES WERS PUNCHASSID. | | Names. | Amount. | | Vivian and Sons. | 482\(\) 2064 | 9 0 | | Grenfell and Sons. | 307 | 1510 18 0 | | Revill, Druce, and Co. | 381 | 1448 | 2 0 | | Williams, Foster, and Co. | 332\(\) 1290 | 3 0 | | Williams, Foster, and Co. | 184 | 647 18 0 | | Charles J. Lambert | 370 | 1436 | 1 0 | 2027 £8297 11 0 Total

NO SALE on Thursday next, September 13.

Copper ores for sale at the Royal Hotel, Truro, on Thursday week—Mines at parcels.—Devon Great Consols 1023—South Caradon 470—Marke Valley 375—On sislake (Clitters) 319—Hingston Down 197—Glasgow Caradon 195—Bedford Unit 122—Wheal Courtensy 76—East Caradon 70—Prince of Wales 67—Belstone 36 Wheal Russell 30.—Total, 2250 tons.

WATSON BROTHERS' MINING CIRCULAR.

Ten years ago the weekly information which had previously been published for a great number of years in WATSON BROTHERS' Mining Circular was transferred to the columns of the Mining Journal, with the following announcement; which is now reproduced in consequence of the numerous letters and enquiries handed to them of late in reply to one which appeared in the Journal on the Clementina Mine.

The great extension of mining husiness, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Mesers, Warson Brottzers to make their Circular now published in the Mining Journal more extensively known, and

their Circular now published in the Anang Journal more excession.

That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash or for the usual fornightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charges for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in upon the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

ticular mine for their elients, for the inspecting agent's fee of £2 2s.

In the year 1843, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. Warson, F.G.S., author of "Gleanings among Mines and Miners," Records of Ancient Mining," cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining therest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. Warsox was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Mesers. Warsox Brotthers have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and sharedealing than there is at present; and from the lengthened experience of Messrs. Warsox Brotthers they are emboldened to offer, thus publicly, their best services and advice to all connected with mines and mining.

Messrs. WarsoN BROTHERS are daily asked their opinion of particular mines, as well as to recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Watson Brothers.

WATSON BROTHERS.

MINEOWNERS, STOCK AND SHARE DEALERS, &c., 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

1. It is just possible the "boring machine" may create a revolution 1. It is just possible the "boring machine" may create a revolution inning. We understand it effects a saving of 30 per cent. in the cost of working, and a very great saving in time. Metallic minerals are all encised in hard rock, every foot of which has to be blasted by gunnowder or dynemite; and to insert the explosives holes have to be drilled by manual labour at great trouble, time, and expense. A hard rock will sometimes cost 400, per fathom.nearly 70, per foot, and very little can be done in a month. The new boring machines drill these holes quickly and cheaply, and their action in regard to mining operations may be compared to what the reaping machine is to the old seythe in agriculture. The only wonder is they have not been introduced before.—2. We cannot answer the next question.—3. All mines are a speculation more or less, and no one should go —3 All mines are a speculation more or less, and no one should go into dividend mines to pay less than 10 per cent., or into speculative mines with money they cannot afford to speculate with. In choosing mines a good selection should be made, and good management be a

GLENROY IS Slower than we were led to expect. A large state-holder who was underground in the mine list week writes a lvising operations to be confined to sinking the shaft, in which there is a lode 6 feet wide, and he sees no reason why Glenroy shareholders should not be rewarded for their patience as well as Great Laxey, which gets all its riches in death. Glear was formerly a part of Great Laxey, and on a parallel lode, and Capt. Rowe led us to look for immediate riches. Great Laxey pays 30,000% a year in dividends. North Laxey ought soon to be in a profitable state. Shares are lower, ju-t as other things are lower, for want of business.

lower, just as other things are lower, for want of business.

SATURDAY, SEPT. 1.—There has been very little doing to-day, and prices are, therefore, merely nominal. Great Lixey, 20 to 21; East Van. 4½ to 5; Glenroy, 1 to 1½; Tankerville, 6½ to 6½; Roman Gravels, 9½ to 9½; Van, 31 to 33; North Laxey, 14s. to 18s.; Parys Mountain, 6. to 8s.; Vest Toglus, 74 to 75.

MONDAY, SEPT. 3.—Market very quiet. Tin shares offered at a reduction. Vans and Parys Mountain also weaker. Carn Bres, 21 to 23; Tincroft 10 to 11; South Condurrow, 7½ to 7½; Van, 30 to 32½; Parys Muntain, 6s. to 8s.; Rockbope Lead, 2½ to 1; West Tolgus, 73 to 75; Devon Consols, 3½ to 4; West Craven Moor. 10 to 12; East Van, 4½ to 5.

Vans and Parys Mountain also weaker. Carn Brea, 21 to 23: Tincroft 10 to 11; South Condurrow, 7½ to 7½; Van, 30 to 32½; Parys M untain, 6s. to 8s.; Rookbope Lead, ½ to 1; West Tolgus, 33 to 75; Devon Consols, 3¾ to 4; West Craven Moor, 10 to 12; East Van, 4½ to 5.
TU-SDAY, SEPT 4.—Market very dull, and quotations in most cases nominal Carn Brea, 19 to 21; Devon Great Consols, 3¾ to 4; Dolcosth, 22 to :4; East Van, 4½ to 5; Glenroy Lead, 1 to 1½; Great Laxey, 20 to 21; Ladywell, ¾ to 1; Eaadhills, 5½ to 5½; North Laxey, 14s. to 16s.; Parys Mountain, 5s. to 7s 6d.; Prince of Wales, ¼ to 5½; North Laxey, 14s. to 16s.; Parys Mountain, 5s. to 7s 6d.; Prince of Wales, ¼ to 5½; North Laxey, 14s. to 16s.; Parys Mountain, 5s. to 7s 6d.; Prince of Wales, ½ to 5½; South Condurrow, 7½ to 7½; Tankerville, 8½ to 6½; Tihrooft, 9 to 11; Van, 30 to 32½; West Chiverton, 12 to 13; West Craven Moor, 10 to 12; West Tankerville, ½ to 1; West Tolgus, 72½ to 75; Grenville, 30s. to 35s.; East Craven Moor, 10 to 11; Eberhardt, 5½ to 6½; Rickmond, 4 to 4½. Wedneys almost the same as vestereday.

TRUESDAY, ATC. 30.—Market very quiet, and quotations nominal. Carn Brea, 19 to 21; Devon Great Consols, 3½ to 4; Dolcot h, 23 to .4; East Van, 4½ to 5; Glenroy Lead, ½ to 1; Great Luxey, 20 to 21; Leadhills, 5½ to 5½; Ladywell, ½ to 1; North Laxey, 14s. to 16s.; Parys Mountain, 5s. to 5½; Ladywell, ½ to 1; North Laxey, 14s. to 16s.; Parys Mountain, 5s. to 7s.; Prince of Wales, ¼ to ½; Roman Gravele, 9½ to 9½; Rookhope Lead, 17s. 6d. to 20s.; South Condurrow, 7½ to 74; Tankerville, 64 to 64; 1; Incroft, 9 to 11; Van, 50 to 32½; West Chiverton, 12 to 13; West Craven Moor, 10 to 12; West Tankerville, 64 to 64; 1; Incroft, 9 to 11; Van, 50 to 32½; West Chiverton, 12 to 13; West Craven Moor, 10 to 12; West Tankerville, 64 to 64; 1; Incroft, 9 to 11; Van, 50 to 52½; West Chiverton, 12 to 13; West Craven Moor, 10 to 12; West Tankerville, 64 to 64; 1; Incroft, 9 to 11; Van, 50 to 11; Van, 50 to 15; Grenville, 30s. to 35s.

Fudday, 12 to 12 to 13; West Cr

30 to 32%; West Chiverton, 12 to 13; West Craven Moor, 10 to 12; West Tanker ville. 36 to 15. West Tolgus, 72½ to 75; Grenville, 30s to 35s.

Fulday, Sept. 7.— Market again very quiet, and prices merely nominal Carl Brea, 19 to 21; East Van, 4: to 5; Glennoy (Lead), 3; to 1; Leadhills, 5½ to 5½ North laxey, 14s to 4s.; Roman Gravels, 9½ to 9½; Rookhope, ½ to 1; Van 30 to 32%; West Tolgus, 72½ to 77½; Prince of Wales, ½ to ½.

Registration of New Companies.

Thefollowing joint-stock companies have been duly registered:-

The following joint-stock companies have been duly registered;—ERYRI SLATE COMPANY (Limited).—Capital 25,0001, in 51. shares. To carry into effect an agreement made between W. A. Stevens and W. Stevens, of East Indian Avenne, trading under the firm of Ogiby, Moore, and Co., the vendors, of the first part, James Seagrave, of the second part, and Robert O. Law on behalf of the company of the third part, for the acquisition and working of minerals under lands in the parish of Lianlivfin, in the county of Carnarvon. The subscribers (who take one share each) are—M. de B Seagrave, 168, Canton street, Poplar, clerk; J. W. Mescher, 10. Hillmarten-road, Islington, clerk; E. C. Hardy, 47, Balance-road, Homerton, solicitor's clerk; G. H. Frver, Belsize Park, clerk; C. H. Kingston, Oakley-quare, Camden Town, clerk; Edward Budden, 23, St. Mary Axe, shipping agent; P. Chipp, 5°, Fitzroy-road, Regent's Park, clerk. The directors are Lord Clarence Paget, Sir. L. Turner, Morzan Lioyd, Q. C., M. P., and T. A. Roberts, the qualification being the holding of 20 shares.

PEEL PAPER COMPANY (Limited).—" upital 50,0004, in 51. shares.

ord Clarence Pages, on the holding of the qualification being the holding of ER COMPANY (Limited).—Capital and premises of the Br ts, the qualification being the holding of 20 shares.

APER COMPANY (Limited).—"cupical 50,0004, in 5l. shares. To acond, buildings, and premises of the Brookside Paper Company (Li-Ironokside, Lancaster. The subscribers who take one share each) are.

"Long-light, Manchester: G. Heatcots, Groavenor-street, Manchester; John Oliver, 46, Brunawick-street, Wardenster; London Charles, Company of the Company of the

Orling, Keighley.

Dayley, Keighley.

WHIIF'S MOC MAIN PATENT LEVER TRUSS COMPANY (Limited).—

standard to fond, in 16t, whares. To take over the business of Mr. John White, of 228, Frecavilly, proprietor and manufacturer of the pitent moc main lever trues. The subscribers are -John White, Ficoadilly, 75; M. L. Davies, 18, Lawn b-trace, Blackheath, 2; C. C. Swift, Goucester road, South K-nsington, 10; G. H. Smith, Richmond Villas, North Kensington, 10; W. S. Furith, Richmond Villas, North Kensington, 2; F. G. Palmer, Carlisle street, Soho; George Spencer, Clifton, Detect 10.

Remington, 2; F. G. Palmer, Carliale street, Soho; George Spencer, Chiton, Bristol, 10.

T. J. DENNE AND CO. (Limited). —Although the proposed capital of this company is represented by the modest sum of 200%, divided into eight shares of 25%, each, it is listended to take over the business of paper collar manufacturers carried on by Messrs. T. J. Denne and Co., at London Works, Old Kent-road. The subscribers (who take one share each) are—Joseph Hunt, 12, Sherborne-lane; R. Workman, 12, Sherborne-lane; B. Workman, 12, Sherborne-lane; B. Workman, 12, Sherborne-lane; R. Workman, 12, Sherborne-lane; R. Workman, 14, The Grove, Woodford; J. G. Powers, Tew Basinghall street; T. J. Denne, London Works, Hatcham-road; F. M. Denne, London Works, H. C. J. Denne, London Works, H. R. Denne, Eisthourne-BERRY HILL, MANSFIELD, SAND COWPANY (Limited) —Capital 10,000%, in 10% shares. To acquire the lease of land at Berry Hill, Mansfield, Nottingham, and to work for sand. It is also intended to carry on business as dealers in sand and other minerals. The subscribers (who take one share each) are—E. W. Walker, ork for sand. It is also intended to carry on business as dealers in sand minerals. The subscribers (who take one share each) are -E. W. Walker, rish, D.-von; H. C. Tornery, Millaard, Sheffield, manufacturer; Albert Sheffield, merchant; W. Wolfenden, Sheffield, secretary, W. Spurr, Mans of Letter; John Shith, Berry Hill, near Mansfield, farmer; T. Robinson, H. Mansfield. The directors are - Messrs, Walker, Trenery, Wolfingden, J. Shith, and J. W. Walker, the said of the shift of th

ry Hit, Mandi-dd. The directors are - Mesers. Walker, Trenery, wollingten, itr, and smith, the qualification being the holding of 50 shared. NESTMENT WAY FIELD COMMERCIAL LAND, BUILDING, AND INVESTMENT MPANY (Limited).—Gapital 100,00 d., in 50, shares. To said, let, and deal in 1, &c. The subscribers (who take one share each) are - J. O. Norris, Belie Vue, kenield; E. Driver, Arundei street, Wakefield; John Dunn, Charlotte street, kefield; John Dunn, Charlotte street, kefield; John Masterman, King-street, Wakefield; E. Brown, Strafford-square,

Wakefield; J. W. Young, Westfield-terrace, Wakefield; H. Roberts, Northgate,

KEM PTON PARK RACE COURSE COMPANY (Limited).—Capital 30,0001. Sol. shares. To establish and maintain a race course in the parishes of Hau pton, nbury, and H. nworth, Middiesex. The subscribers are—8. H. Hyde, 50, tens-quare. Bri-tol, secretary, 30; Thomas Luwley, Maitland Park Villas, evens-cok Hill, 20; G. Alsbury, Royal Hotel, Southport, 10; S. Smith, Openshaw dige, Manchester, 10; J. Brilow, Blackfriars street, Saiford, 10; C. Brook, andford street, Portman square, 5; and John Rossall, Salisbury Hotel, Fleetwet, 10.

street, 10.

HORNCASTLE PERFORATED BRICK AND TILE COMPANY (Limited).

Capital 18,000%, in 5% shares. To acquire land at Horncastle Lincolushire, and to curry on business as brick makers, &c. The subscribers (who take one share each) are—Alexander Dalrymple, New-street, Kennington Park; B. 6. Fraser, 6, Wildmoor grove, Humpstead; B. B. Moore, 27, Great Castle-street, Cavendish-square; H. Lzunt, 8t. Peter's road, Croydon; J. Wood, 94, Cowley road, Brixton; W. H. Price, 28, Duke-street; and E. J. Edwards, 58, Liverpool road, N. aUTOMATIC BUITON COMPANY (Limited),—Capital 2800/, in 10% shares. To acquire Letters Patent granted to Alexander MacMillan for improvements in buttons, and methods of fastening the same.

Mining Correspondence.

BRITISH MINES.

BRITISH MINES.

ABERDAUNANT.—S. Toy, Sept. 5: The new shaft is now down 10 fms. 1 ft. below the deep adit level; the ground is much the same forsiuking as it has been for some time past. In the east part of the sett (Crowlwm) in the cross cut driving towards the new lode we have met with another branch of barytes 2 in. wide, spotted with copper ore, bearing about east and west, and underlying north 2 ft. per fathom. The water is all issuing from the bottom of the forebreast. I have set the cross-out to drive south, by six men and one boy.

ASSIETON.—J. Craze, Joel Manley, Sept. 6: No change to note in the 50 and 20, east of Mawr, south on north and south lode. The same remark applies to the rise in back of the 20 south, and the 20 east of the north and south lode, towards Cambrians thatfe. The 90, east of boundary, is producing good stones of lead and blende. The tribute pitches are yielding fair quantities of lead ore.

BODIDRIS.—H. Hotchkiss, Sept. 5: The heavy rain which fell here on Sanday and Monday has flooded the 60 and 70 yard level, causing the stoppage of all work here for two days; consequently there is no change to report on in either of the workings since my last report. I am pleased to say that the 60 is again clear, and the men have gone to work in the level east and cross cut south this morning, and I expect the 70 to be clear by to-morrow morning, so that the men can resume oparations again. The 45 is still very promising for an early improvement, and the stops in the bottom of this level slightly improved since my last report. All other points of operation are without material change. The different points of development are progressing very favourably.

CAMBRIAN MINES.—Chos. Glanville, Sept. 6: ESGAIR-FRAITH; The eastern

s of operation are without maierial change. The different points of developance progressing very favourably.

MBRIAN MINES.—Thos. Glanville, Sept. 6: ESGAIR-FRAITH: The eastern is sunk at out 9 fms. 3 ft. below the 10. During the last 2 ft. sunk through ad part of the lode has greatly improved, being now 6 in. wide, nearly solid, is worth at least 500, per fathom. The copper part of the lode in the shaft to been taken down since my last report. The winze sunk below the 10, and of shaft, still continues to yield very rich copper ore, and is worth, as re dlast week, 500, per fathom.

GAIR HIR.—The lode south of new shaft is worth 201, per fathom for lead In conclusion, I have much pleasure in stating that the mine has never ds on well as sit present, and when we have sunk the shaft (Esgair-Fraith ris shaft) deeper, and opened out levels, it will assurely prove to be a very mine.

eastern shaft) deeper, and opened out levels, it will assure Hy prove to be a very rich mine.

CARGOLL.—John Jennings, Sept 5: In the 34 fm. level, east of Bowyer's shaft, is a strong westerly lode 2½ ft. wide, with a quantity of water issuing from it, and I have driven east near the point where the shoot of lead gone down from the 24 may be met with, and I am expecting daily a good improvement here. The 34, west of shaft on the No. 4 branch, is a very promising lode, but the leader of lead is squeezed smaller than usual; cone quently it is only now worth 44, per fathom. The lode in the winze in the 24, east of shaft, for the first 5 ft. sluking was worth 15. per fathom; at precent it is not looking o well, but the lode is of a highly promising character, and I hope to see very soon a good lode of lead here again. The stope in the back of the 24, east of shaft, is worth 104, per fathom. The 24 fm. level east on the cunner part is producing a little lead, and from indications Lexpect to he very ago of the late heavy rains the expect to he very ago of the late heavy rains the

I expect to he was good improvement here shortly. Other places are nowing indeas as usual.

COMBMARTIN.—J. Comer, Sept. 6: In consequence of the late heavy rains the water has risen above the 37, so that we have to suspend operations there; but we hope only for a short time, as the water is falling back. We have put a pare of men to cut through the lode in the 28 east, where we have a strong lode; so far as cut into it is 6 ft. wide, composed of capel and quartz, with a little sliver-lead and blende. We have put four men to clear the 28 west of cross-cut, where we hope to find lead ground. In the 37, east of cross-course, the lode is without siteration, profunding 2 owns, of sliver-lead per fathom. The lode in the stope below this level is worth fully 5 cwts, of silver-lead per fathom. The stope in back of the 37 will yield 7 owts. of silver-lead per fathom. In the 37, west of cross-courses, the lode will produce 2 cwts, of silver-lead per fathon.

In the 37, west of cross-course, the lode will produce 2 cwts, of silver-lead per fathom.

ield 7 owts. of silver-lead per fathom. In the 37, west of cross-course, the lode iil produce 2 cws. of silver-lead per fathom.

CWM ELAN (NEW)...W. Goldsworthy, Sept. 1: In the 40 west the lode taken own since I wrote you last is small in the present end, but not unproductive; is is apparently only temporary, as the lode is ext-nded it regains its usual con ituting parts. I may remark that the 30, above this point, was not very producture; us the 40 east, on the south lode, there has been no lode taken down this cek; the men are driving by the side thereof. In the same level, on the north det, the lode is worth 10 cwts. of lead ore per fathom: this lode is opening out cell. The 30 weat is still being driven in the same disordered state of ground, extendy with fine strings of lead ore. The work from this end is passed through the dressing floore, and pays for doing so. There is no alteration to notice in evarious stopes since last advised. We have 5 tons of lead and 12 tons of blende the bin.

BROKE.-J. Phillips, Sept. 5: The lode in the 45, driving west of Wil-on's and there is no standard and there is no standard and there is no standard and there are the standard and there is a standard and saving work for dressing. The rise men are drawing water from the winze, and I hope to effect a communication by boring in a short time; the rise shows not patches and branches of ore, but there is a considerable portion of the lode anding on the north. The stopes at the 35 are looking very promising, and there a fine-looking lode in the stope at the 25 yleiding 45 owts. of lead ore per fathom, ressing and all operations are being pushed on steadily, and all the machinery in good order.

Dressing and all operations are being pushed on steadily, and all the machinery sin good order.

DEN BIGHSHIRE CONSOLIDATED.—John Pryor, Sept. 6: As you are aware room my previous communications progress has been much retarded during the last fortnight, owing to the great floods we have lately experienced. In addition the air-pump broker, all, however, is now right, and the men are at their various origins. At Parry's sump we have a good improvement, and I believe we are observed in the properties of the properties. The sum of the real properties of the properties of the properties. The sum of the underground workings.—J-ffries Shaft, fiddle Vein: The 95 east is by the side of the vein. In this level in attipping lown the lode, 8 fms. behind this end, it yields for 7 ft. wide about 3 tons of or ser fathom, and the stopes in the back for the entire width of the lode yield 4 tons, 14 cwts., and 12 cwts. per fathom respectively. The worth of the flats 14 cwts., and 12 cwts. per fathom respectively. The worth of the flats is 4 cwts. or or per fathom. The only change in the rise, 18 fms. east of shaft, at the stopes in the back are yielding for the full width 16 cwts., 14 cwts., and 3 cwts. per fathom respectively. In the Sun we not have a seven per fathom respectively. In the Sun we not have a seven per fathom respectively. In the Sun we had been such as the development of the flat with 15 cwts., 14 cwts., and 3 cwts. per fathom respectively. In the Sun we not have lower the sun of the development of the little limestone is 2½ ft. wide, and worth 4 cwts. of ore per fathom. In the north vein the 50, east of Relda, is without change, and so is the 49 cross-cut, ast of Taylor's, on middle vein.—Westgarih's Shaft, Middle Vein: The 93 east is riving ry the side of the lode, at 50. lbs. per fathom.—Burface: The maintenance of the limes of the lode, at 50. lbs. per fathom.—Burface: The maintenance of the limes of the lowes of the copper standard at the sale of cress of the limes to the copper standard at the sale of creso

i Richards, Sept. 7: In come queme of the opper standard at the sale of oreo on Aug. 1-in ulterations in the raising of some of it standard will not yield a profit. These on of the costs, and in the general mode of ney are being carefully considered and The sampling on Friday, Aug. 39, is com-

oted at 1023 tons.

LAST CARADON.—Jomes Kellow, Thomas Trelease, Sept. 5: During the past north Williams' shaftonen have been employed completing cist rn plat, putting to tearers and citers, fixing new standing lift, changing pole, &c. The winking ill be resumed forthwith. To drive the cross cut in the 159 north from the bot om of the winze I fm. stent, by nine men, at 13t per fm.; it measured 2 fms. 1 ft. the ground is without atteration. To drive weet on the south part of Child's e resumed forthwith. To drive the cross-cut in the 150 north from tho bot of the winze 1 fm. stent, by nine men, an 18 feer fm.; it measured 2 fms, 1 ft. ground is without alteration. To drive west on the south part of Child's 130 fm. level 1 fm. stent, by four men, at 122, per fathom; it was driven 2 ft. 3 in. The lode is small, producing occasional atones of ore; ground by factorizable granite. To stope the caunter in the bottom of the 90 fm. level, to stent, by two men, at 32, 3s, per fm.; it measured 2 fms, 2 ft. 6 in., yield. e eight trib

communicate with the shaft as early as possible. There is 178 east, which is still on a north part of the leds; we shall not, the south part until the end is forth to the winze, and that level. The 78 west, on south branch, is worth 60 er that bottom of midway the lode is large, and worth from 18 to 18 g, other change in the underground department since our report of the stopes turning out their usual quantities of ore. The surface wing favourably, and in a forward state. The computed quantities of the computed quantities of the state of the surface wing favourably, and in a forward state. The computed quantities of the computed quant

GORSEDD AND MERLLYN CONSOLS.—W. Edwards, Sept. 6; In GORSEDD AND MERLLYN CONSOLS.—W. Edwards, Septom level, driving west, the appearances are becoming more as men open upon the loie, which is of a very strong christer, level the ground is hard, but the lode looks well. In the intermed a great improvement his taken place since my last report, the splendid course of lead ore, and we have drawn during the past splendid course of lead ore, and we have drawn during the past mine throughout continues to look well. The north cross occurs for the west is making better progress than I should have any cannot now be far from intersecting it. The north cross occurs the north cross of the more throughout the nine.—Dressing-Floor: The whole of the cannot now be far from intersecting it. This is one of the most elevered, and we shall sample again on Thursday next another particularly.

GREAT DYLIFFE.—Evan Evans, Sept. 5: There is no change and in our underground operations to report on this week. A set sent next week. We have sampled 60 tons of ore today, for instant.

GREAT RETALLACK.—J. Harris, Sept. 1: I have set the

ance in our underground operations to report on this week. A setting: instant.

GREAT RETALLACK.—J. Harris, Sept. 1: I have set the mra a drive both east and west of the shaft, the men to be paid z. Perfather and the set of the shaft, the men to be paid z. Perfather to pay all cost as usual. They have also the prize to stope the east of blende and the west end fully 2 tons per fathom. The stope blend is not looking so well for blende. A hard bar of ground came down is not looking so well for blende. A hard bar of ground came down is not looking so well for blende. A hard bar of ground came down is not looking so well for blende. A hard bar of ground came down is not looking so well for blende. A hard bar of ground came down is not looking so well for blende. A hard bar of ground came down is not looking so well for blende. A hard bar of ground came down 3 tons of blende per fathom.

GREAT RETALLACK.—J. Harris, Sept. 5: The mine is looking mesh when I last activised you. The 53 ends both east and west are worth 2 tons of ore respectively.

HINGSTON DOWN CONSOLS.—Thomas Richards, Sept. 6: Balled down the required depth for the 172 fm. level, and immediately the which is commenced driving will be proceeded with.—Balley the water of Nichollis's winze, the lode is worth 4 tons of ore, or 12, Sept. 1; worth 6 tons, or 30. Per fathom. The stope in back of the low winze in the bottom of this level is for the present suspender the worth 6 tons, or 20. Per fathom. In the 160 winze, is let on tribute In the 150 west, on the south part of the lode, where the lode will produce 5 tons of ore, or 120. Per fathom. In the 160 of Chynoweth's rise, is worth 5 tons, or 180. Per fathom. In the 110 whouth part of the lode, the lode is producing a little rich ore, and is continued operator without any material change, and are yielding large returns of richors.

HOLMBUSH.—H. Bennett, Sept. 6: All our underground operator without any material change, and are yielding large returns of richors of the sect. of copper; 65 tons, 4½ per cent

sommenced driving on the new north lode, which is remarkably sel detailed reportshall tollow.

KINGSTON CONSOLS.—J. Chynoweth, Sept. 5: Good progress has driving west on the 30; lode 3 ft. wide, composed of lead, blende, quart ful capel, and sulphur mundic: a very promising lode. It has been driven the lode is 2 ft. wide, worth ½ ton of blende, and 2 to 3 cwts of lead per line libe, as it in the same level west the lode is 2½ ft. wide, composed of geosan, quainty stones of lead and blende; very kindly e.d. more especially as we in the western hill. Good progress has been made in slank the side of geosan, quainty stones of lead and blende; very kindly e.d. more especially as we in the western hill. Good progress has been made in slank line in the western hill. Good progress has been made in slank line in the western hill. Good progress has been made in slank line in the western hill. Good progress has been made in slank line or, in money value, 17. Per fathom. In No. 1 stope, in back in each line or, in money value, 17. Per fathom. In No. 1 stope, in back it he list, worth 10 cwts of blende and 4 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 4 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 4 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 4 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 5 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 5 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 5 cwts. of lead per fathom. In No. 2 dink is worth 1 ton of blende and 5 cwts. of lead per fathom. Blood lode is worth 1 ton of blende and 5 cwts. of lead per fathom. Blood lode is worth 1 ton of blende and 5 cwts. of lead per fathom. Blood lode is worth 1 ton of blende and 5 cwts. of lead per fathom. Blood lode is worth 1 ton of blende and 5 cwts. of lead per fathom. In No. 2 tons; to be sold on Sept. 13. All 1 the machinery in good working ofter. LLAN-6AN.—Thomas Wasley, 8-pt. 6: The engine shelf: in n ctation report shall follow.

KINGSTON CONSOLS.—J. Chynoweth, Sept 5; Good progress has be riving west on the 30; lode 3 ft. wide, composed of lead, blende quant

one 24, to six men, at 18. per fathom; very little umonth, and I have been compelled to change the rogress now. To stope the side of level in the 12 athom, lode worth 8. per fathom. To stope the side of level in the 12 our men, at 80s. per fathom, to include timbering, ead and blende. The cross cut to north lode has only only men at 130s per fathom.

the measured 1 fm. 5 ft., yielding 1% ton of ore per fathom. There were eight tribute of pitches set; each, by two men, for one or two months, at 18s in 12.

EAST VAR.—W. Williams, Sept. 6: The 40 cross-cut from Tempest shaft is driven north 8 fms. Nothing new to report upon at the other points of working.

EAST WHFAL LOVELL—R. Quentrall, Sept. 5: There is no change in the mine to notice since the meeting. The lode sinking below the 100 continues to be worth quite: 00, per fathom.

GAWION COPPER.—G. Rowe, G. Rowe, jun., Sept. 1: There is no change in the lode in the rise or stopes, which is communicated with the winze in the back of the 132 during the past week. The men having been chiefly engaged in drawing their stoff and elearing up the ore previous to letting the ground on tribute, as we purpose to do. The lode in the 105 cast is carried 6 ft. wide; of a most promising description, producing from 8 to 10 tons of ore and mundic per fathom. The lode in the each of the 105 west is 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide, of the same devel driving west of cross-cut is carried 9 ft. wide producing over 20 tons of ore and mundic, or value of the ground in the \$2 cross-cut is drawing to the same devel driving west of cross-cut is drawing to the same devel driving west of cross-cut is drawing to the same devel driving west of cross-cut is carried 9 ft. wide producing over 20 tons of ore and

fair working order.

NEW SOUTH MERLLYN.-R. Rowlands, Sept. 6: The 50 yasis invi.

er good stuff for the washing floor. Our other operation also improves, is rill of ore on the heading wall, is rill of the state of the

off for the washing wall, re ou the heading wall, re ou the heading wall. Sept. 5: There is no change in this mine since my last respect of children gast on No. 1 north lode, which has now into the fathom (instead of 6 owts., as last reported), and it goes well, we hope to be in fork to the 4) by Friday inc is looking well, and everything is going on well both

nine is looking wen, and round.

spand.

spand.

spand.

25, has further improved, worth 1 ton of lead per fathom.

25, has further improved, worth 1 ton of lead per fathom.

25, has further improved, worth 1 ton of lead per fathom.

15, —J. Mitchell, sept. 6: We have just cut a flookan joint to the 90 south, and the ground is now much easier for the in the 90 south, and the ground is now made in the driving. There is no change to great just the 38 west has further improved, and is now his week, but the 38 west has further improved, and is now his week, but the 38 west has further improved, and is now his week, but the 38 west has further improved, and is now his week, but the 38 west has further improved, and is now his week. k, but the ourse. I think we shan me. I think we shan are ore is pretty good.

species is being mass in the search as further improved, and is now as this week, but the 38 west has further improved, and is now as the people of the control of the cont

sto sell this month about 4 ton-of tin. We are making sampling of copper ore. arland, Sept. 6: New Shaft: Driving the 36 east has rogress is being made; the lode in the present end is s' wince sinking below the 24 the ground is still very a slow; the lode produces stones of lead ore, but not et's wince being down the required depth for the 36, wor has been commenced in a lode worth ½ ton of lead the eastern end looks very kindly for an early improve-re almost overpowered with water, and all well shall lead to the state of the state tera charactery with water, and all well shall unday next, which, when completed, will ensure a clopment of this s ction. In the 24 east, on the fa very promising character, and now produces on. The two stopes in the roof of the 24 maintain 15 cwts, of lead ore per fathom. On the whole, se looks very encouraging. Drawing and dressing satisfies towards another sampling at an early date, og order, with a good sapply of surface water, notrews, 8ept. 6: We have completed the ladder the silver lode, and I hope the casing and bedief of the week, when we shall at once resume opeit can be worked from surface to the deep adit, everal hundred fathoms in length, without pumpar sale on the 20th inst. computed 67 tons: pro

e for sale on the 20th inst. computed 67 tous: proron, Sept. 1: I beg to hand you the setting report of
istoping over the adit, at 20s. per fathom, and filling
y costs. Four men stoping in the branch lode to the
be per fathom, worth 30 owts. of ore. Four men stop
back of the 15, at 28s. per athom, worth 30 cwts. of
the back of the 15, near Gin shalt, at 20s. per fathom,
reen in the back of the 25, at 24s. per fathom, worth
illing up the ground by day, to commence stoping at
yand completing the Gin shaft between the 25 and the
we expect the Gin shaft will be completed down to the
to six men to drive the 42, one mouth, at 24. 12s. per
to the old or Stotsfield engine shaft. When the Gin
from the 42 will be drawn up the same, which will be
ne. The general appearance of the mine has improved
by have been breaking considerably more ore than has
lone siggers are working satisfactorily on high floors
il wheel case and buddles, which we hope to get fixed
then we shall be able to treat considerably more stuff,
is week.

cek. Francis, 8-pt. 5: We still get good stones of lead in the 120 yard level, and the ground looks kindly, horoughly before resuming the cross-cut north, lert measures, progresses very favourably in every

-H. James, A. Gundry, Sept. 4: Owing to the heavy falls ned the 90. The 80 has further improved since last fathom. There is no change worthy of notice in any new buddle and large classifier will be at work to-or the ragging mill is fixed, and we are awaiting the is promised specifly. The fitter has commenced led 25 tons of silver lead ore yesterday, for sale on

Waters, Sept. 7: Telegram . Bottom ends improving

orted on.

C. Vivian, Sept, 6: There is very little change to
meeting. There is a course of quartz gone off on
learrying some copper ore on which I have ordered -Wm. Goldsworthy, Sept. 6: The lode in the 56 west is

so very wet our progress is still slow. The lode 10. per fathom. The lode in the 34 west is worth is in good order, and working well.

Joel Manley, Sept. 6: The lode in the 80, west promising. The lote in the 60 west has greatly the part carried 15. per fathom. No change to

-David Williams, Sept. 6: The Backhill adit level is 100, at 100, per fathom. The vein in the end is very

sithif, in a lode 2 ft. wide, worth 1 'ewis. of ere per fathom, it south upon a cross vein which is from 5 to 6 ft. wide, filter in branches of lead ore.—New East Shaft: Two men to drive in which is from 5 to 6 ft. wide, filter in dranches of lead ore.—New East Shaft: Two men to drive in which is over I ft. wide, projectly a few days improved, being if the men to stope in the back of the level, in a lode 2 ft. wide, which wide more in the back of the level, in a lode 2 ft. wide, without for lead ore. Four men to elevel east on the worth 20. per fathom for lead ore. Four men to elevel east or dross-out; the lode is 2 ft. wide, worth 16 ewis lead wide, and worth 20. per fathom for lead ore. Four men to elevel east of cors or four men to stope the back of the level weat of cross-wide, worth 16 ewis lead of the level weat of cross-wide, worth 16 ewis lead of the level weat of cross-wide, worth 16 ewis lead of the level weat of cross-wide, worth 16 ewis lead of the level weat of cross-wide, worth 16 ewis lead or four men to stope the back of the level weat of cross-wide, worth 16 ewis lead or four the men to the level weat of cross-wide, worth 16 ewis little 4 ft. the lode in the end is from 3 to 4 ft. wide, you have a staffs from aurface in the button is fully 3 ft. wide, and worth 30. per fathom is link of the sextended 3 fms east of No. 1 short, in a lode his ewis of lead ore per fathom. On surface the new smith's thing the same will be here the beginning of next week, and 1 is of ore read your smelling very soom.

bearer and cistern preparatory to fixing the same at the 12. The shaft is nearly clear for several fathoms below the 12, we dropped a line 6 fins. 2 ft. to day. The lode in the 12 wesr is of great promise, and improved since our last report.

WEST TANKERVILLE.—A. Waters, Sept. 7: Telegram: Large lode in 86 with good lear and blende: great -at-tode cut in 65.

WEST WHEAL TOLIGUS.—Sept. 5: Taylor's Shaft: We calculate the shaftmen will complete the cutting of the plat in the 145 by the end of this week. The lode in the 145 end west is still 6 ft. wide, and letting out plenty of water, but not so good as reported last week; it will now yield 4 tons of ore per fathom. The lode in the 15 end west is without alteration in value, and still yleiding 3 tons of ore per fathom. The lode in the No. 5 winze below the 135 is 9 ft. wide, and yielding 4 tons of ore per fathom. The stopes in the back of the 155 are yleiding 2½ tons of ore per fathom. The lode in the 125 west is 2 ft. wide, and yielding 2½ tons of ore per fathom. The is a little failing off in the value of this end, but we have no doubt of the lode soon getting better again. There is a good run of ore gree down in the bottom of the level over, before the 125 end. We are making fair progress in sinking Richard's shaft. The lode is poor, but the ground good for sinking in. The fode in the 75 end west is small and poor. The lode in the 65 end west is opening a little wider, but still poor.

WHEAL CREBOR.—John Andrews, Sept. 4: The lode in the 120 east is opening out very well, and is still worth fully 20. per fathom. The lode in the back of the 129 is worth 10/, per fathom. The lode in the back of the 120 is worth 10/, per fathom. The lode in the back of the 120 is worth 10/, per fathom. Both the 72 and the 48 ends are without hange.

WHEAL GRENVILLE.—T. Hodge, Sept. 4: The mine is drained to bottom,

same level is worth 12'. per fathom. Both the 72 and the 48 ends are without change.

WHEAL GRENVILLE—T. Hodge, Sept. 4: The mine is drained to bottom, and the 160 east end resumed by four men, the lode in which is worth 7'. per fm. The part of the lode carried in the 150 east end is producing low-price thistone; tabout 5 fms. behind the present end a branch of the lode is gone off in the south side, and I have placed two men to drive in that direction to prove its value. In the 139 west end the lode is pinched up small; it is about 20 in, wide, producing occasional good stones of tin. The 130 east end is worth 7'. Per fathom, an ilkely to improve. The north shaft is 7 fms. 3 ft below the 140, and fair progress is being made. The 140 west end is worth 6'. 10s. per fathom. The 130 east end is worth 8'. per fathom. I see no change in the stopes worthy of notice. Most of the breavy work of our big engine will be in the house this week. I will see the founders in a day or two, to know what progress is making in turning out our other engines, when I will furnish you with a full report in time for the general meeting, which I presume is near at hand. I have not yet tested the boilers at North Crofty. We shall seel about 14 tens of tin at our usual time.

WHEAL KITTY.—Stephen Davey, Richard Harris, Sept. 1: We have no change of importance to communicate, the various polute maintain their value as reported in our last.

change of importance to communicate, the various points maintain their value as reported in our last.

WHEAL NEWTON.—H. Bennett, Sept. 7: In continuing to sink Cook's shaft on the silver lode the ground is improving, and the lode is yielding stones of rich silver. All other points are without change.

WHEAL PRUSSIA.—Wm. Tregay, R. Smitham, Sept. 6: The lode in the 40 west end will produce 2 tons of black tin per fathom, and in the 49 east end 1 ton of black tin per fathom. The new engine shaft is now down 22 fms., sinking stee (1);

I black tin per fathom. The new engine shaft is now down as time, sinking eee 'ily.

WHEAL UNY.—W. Rich, Matthew Rogers, Joseph Rich, Sept 1: The back of he 60 west is worth 8'. per fathom. We have holed the rise in the back of the 120, ast of King's. The 130 east is worth 10'. per fathom. The 140 east is worth 8'. per fathom. The 150 east is worth 7'. per fathom. We have begun te rise in the ack of the 169, towards Goodinge's shaft; the lode carries a little tin The 150 east it worth 5'. per fathom. The 160 west is worth 10'. per fathom. Hind's shaft a worth 15'. per fathom. We have sold to-day 13 tons 13 ewts, 2 qrs. 19 lbs. of tin.

FOREIGN MINES.

ST. JOHN DEL REY.—The directors have received the following telegram from Morro Veilio, dated Bahia, Sept. 3: Produce twelve days, second division of August, 15,750 cits.—6103.; yield, 8 1 cits, per ton. Produce small, from work going on in mine, which interferes with working best stopes

BIRDSEYE CREEK.—Telegram from Mr. G. S. Powers: We have cleaned-up after a run of 45 days. The gross returns are \$15,000; the profit is \$6500; on heard \$2000.

going on in mine, wheelt interferes with working best stopes

BRRDSEYE CREEK.—Pelegram from Mr. G. S. Fowers: We have cleaned up

after a run of 45 days. The gross returns are \$16,000; the profit is \$5500; on

RICHMOND CONSOLIDATED.—Telegram from San Francisco with reference

to the lawauit. Hall, London Nothing till next week. Judge field absent.

HUNTER CONSOLIDATED.—Telegram from San Francisco with reference

to the lawauit. Hall, London Nothing till next week. Judge field absent.

HUNTER CONSOLIDATED.—Telegram from San Francisco with reference

will start smelting in 26 days.

BLUE TENT.—D. J. Hughes, Aug. 11: I have nothing of much importance to
report this week. I have had a good supply of water for the South Yaba, and

used it to a very good a vantage; I think and intend to run until the water falls

before I clean up. At Blue Lead we are working all the hands we can spare on

the outs, and washing as usual with what water we can obtain after allowing a full

supply for the South Yuba claim. I have also commenced cleaning up the log

flumes in the enterprise, and when done I shall proceed at once to wash up the

enterprise dumps, which I believe will yield a fair profit.

DON PEDRO.—Capt. Vivian, August 4: Mine—Crush in Vivian's Shaft: I en
close you letter from the mine captains, by which you will see that an accident

has occurred here, which filled the shaft to within about 13 f.ms. from surface.

Active measures are being taken to repair damages with as little delay as possible.

I am not yet able to form an opinion as to how long it will take to put the shaft

In working order, as it is uncertain where the ornal originated; when that pounts

reached the stuff can be easily cleared where the shaft is secure. For the present

the supply of rich mineral from bottom of the mine will be discontinued. For
tunately, no one was injured, notwithstanding seven men were at the time of the

cocurrence employed repairing said shaft.—No. 8 shoot, No. 2 Stope: I am glad

to inform you that the improvement met

from the bottom of the mine without difficulty. This work is already commenced, and will be pushed on as fast as possible, which I hope will be completed within two months.

— Mine Captain's letter, dated Aug. 4: We have to inform you of a large run in Vivian's shaft, which occurred on Aug. 3. While two Englishmen, with five assistants, were employed repairing same, about 20 fms. below summit, a loud noise was heard below. The men at once left the shaft, and came down and informed the agents at the mine. They at once went in the mine, and found that old timber and stuff had come down the shaft and encountered with the pumping machinery. A force was sent to Alice's to cover over whim end of shaft, but when they arrived they found that the old timber and stuff had formed a choke. On the morning of the 4th the shaft was examined, and found that only about 12/fms. 5f. t. was left open from the summit down. Therefore, we believe that the shaft is filled from the back of Alice's, which will make 43 fms., but we do not know which part of the shaft falled first. We believe somewhere about the shaft will be shaft is filled from the back of Alice's, which will make 43 fms, but we do not know which part of the shaft falled first. We believe somewhere about the shallow level, as in last wet season the surface water found its way down in the flookan in consequence of so much rain, and no doubt carried away the jacotings behind the timber, leaving an open space. The shaft has been constantly under repair for the last I zmonths, which you can see by the mining reports.

Mine captain's letter, dated Aug. 9: The ores extracted have been derived from Nos. 5, 6, and 8 shoots. Notting of any consequence bas been taken from the bottom of the mine in the No. 8 shoot in consequence of the run that occurred in Vivian's shaft in the shoot last month is now exhausted in consequence denering with old timber: however, we are continuing an exploring stope estward to see if any lode might be met with. The No. 6 shoot in the new level has be

that an arrangement will shortly be effected by which this debt will be discharged, so that the amount so received may be distributed amongst the Frontino and Bolivia Company's shareholders in the shape of a dividend. It will be noticed that the pumps, which were too small for the Silencio Mine, will be available for use at the Palmichala Mine; that the pumps in Silencio Mine have at length been completed, and that they have unwatered that mine. By the next mail the directors hope that some of the rich ore from Silencio will be included in the monthly remittance. The directors had contemplated calling u general meeting of the company immediately after the arrival of the present mail, but owing to Mr. Robert White's absence at the mines no report from him can be received until the next mail; it is, therefore, proposed to hold the meeting during the next month, Looking to the disorganised condition in which the revolution must have left the country, and to the fact that this month's returns do not comprise any gold from the Silencio or Palmichala Mines, the directors think that the profit for the month may be considered highly satisfactory.

PESTARENA UNIVED.—The following are the returns for the month of August:—From the Val Toppa district 175 ozs. 16 dwts. 23 grs. of gold, obtained from 410 metric tons of ore—yield per ton, 8 dwts. 13½ grs. From Pestarena district, 160 ozs. 18 dwts. 1 gr., from 240 metric tons of ore—yield per ton, 13 dwts. 10½ grs. Total from both districts, 336 ozs. 16 dwts., from 550 metric tons of ore amaigamated.

BEITTANY MINFRALS.—John Edwards, Sept. 1: We have put the sump

amalgamated

BIATTANY MINERALS.—John Edwards, Sept. 1: We have put the sump shaftmen to sink a winze in the bottom of the 70 fm. level, south of shaft, where the lode is worth 50% per fm. for the length of winze, 13 ft. The 70 end men we have put to stope the bottom of the Sidd level, where the lode is worth 15% per fathom for lead ore. The lodes in Nos. 1 and 2 stopes, in the back of this level, are worth respectively 10% and 20%, per fathom. The machinery is in good order and working well.—[Ore raised since last report, 10 tons.]

THE WEEK.

THE WEEK.

SATURDAY, SEPT. 1.—Before official hours a devoted few made haste to buy Calestonian and North British, fearful that the low prices of the previous evening would never be seen again. They were made to pay 93 for British, and 1284 for Calestonian. At the close the former could be had below 9, and Caledonian at 126. A jump of 2 took place in Central illinois, to 64, 68. Russian of 1873 closed no better than 77½, holders on the Continent having during the last few days shown a wish to sel. New Quebrada shares again rose, now quoted 2½ to 2½. Last Chance, 20a. to 22a. 6d.; Alamilies, 1½ to 1½.

Last Chance, 20a. to 22a. 6d.; Alamilies, 1½ to 1½.

MONDAT.—Russian declined to 79½, and there was a heavy fall in Danubian bonds. The business in the railway market was again mainly centred in Caledonian and British. On the whole, operators for the rise had the best of it to-day, for although Caledonian showed no change at the close British after falling rather considerably finally left off at 83½, or 1½ better. Local tram shares were thus quoted—Belfats, 9½ to 10; Bristol, 8 to 8½; Glasgow, 11½ to 11½; Hull, 18 to 13½; Leeds, 9 to 9½; Sheffield, 10 to 10½; Swames, 9½ to 10.

TUESDAY.—A further fall of 3ℓ. took place in Danubian bonds, making 15ℓ. for the two days. It appears that less than 22,000 would suffice to pay the coupons n we due, but the Government make no sign. Illinois Central shares were done at 807, a rise of over 3 to n the day. The Caledonian dividend was made known to-day. It is to be at the rate of 6½ per cent., same as last year. Though a very good dividend, it proves a disappointment to recent purchase at 130, who allowed themselves to be persuaded that 6½ would be divided. The stock fell to 125, or 1ℓ, lower. British also fell 1ℓ. on apprehensions of the dividend here also being a disappointment. For the last few days there has been some bidding in good quarters for New Quebrada. They could be sold to day for 3ℓ. Parys Mountain, is, to 8. Rookhops, 17s. to 19s. Carn Brea, 18 to 29.

WEDNESDA

ENGINES FOR ROCK DRILLS AND STEAM HAMMERS.

An improved engine, which is claimed to possess many advantages ver those in common use, has been invented by Messrs. WINCHESTER and FLAGLER, of Boston, U.S. The buffers for relieving the conand FLAGLER, of Boston, U.S. The bullers for relieving the conconcussion on the piston consist of two rubber discs arranged on opposite sides of the contracted portion of the steel sleeve. By this construction while the buffers are protected from injury by being enclosed within the extension of the cylinder, they are at the same time located outside of the steam chamber, the inner buffer only being exposed to the exhaust steam. The rubber buffers also located where the oil used to lubricate the piston head does not come in contact with them, and that they are thus protected from the injurious effect of the live steam, the oil, and particles of stone. The invention includes the construction of engine having its valve carried with the piston, and operated by the momentum imparted thereto with the piston, and operated by the momentum imparted thereto by the movement of the piston, which construction allows the valve levers, stems, rods, and the like usually employed to be dispensed with; and also providing the piston with passages for the admission steam or air to move or sustain the valve. The engine has a cylinder provided on its exterior with a screw thread fitting into a holder or nut provided with a corresponding thread, and secured to the column or stand which supports the machine, whereby the auxiliary feed acrey hoverfore employed is dispensed with which acrew column of stand which supports the machine, whereby the auxiliary feed screw heretofore employed is dispensed with, which screw cannot be made of sufficient strength to resist the shock and wear to which it is subjected without being excessively heavy, and thus increasing the diameter of the machine. The invention also relates to constructing the nut or holder through which the cylinder passes, of spherical form, this nut being held within a clamp or socket of a form adapted to receive it, so that the drill may be turned and held in any desired position.

or spherical form, this hat being held within a chain or socket of a form adapted to receive it, so that the drill may be turned and held in any desired position.

For rotating the cylinder there is a ratchet mechanism, operated by an eccentric on the shaft which rotates the piston. The ratchet or pawl is pivoted to a bar or rod which slides through the holder or nut through which the cylinder is fed. The steam or compressed air is introduced into the cylinder through a hollow collur which communicates with steam or air passages in the cylinder head, and moves longitudinally with the cylinder, but does not rotate therewith, the steam or air passing through suitable passages to the inside of the cylinder. The rear end of the cylinder is provided with a shoulder, against which the cylinder head is tightly pressed by means of a sleeve screwed into the front of the cylinder, a series of sleeves and rings being interposed between them, whereby the cylinder head, sleeves, and rings are securely held in place; the employment of small studs, boits or nuts, which are continually getting loose from the effects of vibration or concussion, being thus avoided. The invention also relates to a rock-drilling machine having one or more buffers located within an extension of the cylinder and outside of the steam chamber, whereby the material of which the buffer is composed is protected from the injurious effect of the live steam. And it also relates to a pair of buffers composed of rubber or elastic rings, with a metallic partition interposed, in

July 12, which says "At last we have managed to procure powder, and this very day we send a load by the mail to the mines."

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may be operated by compressed air, according to the method usually employed at the present time in mines and similar places.

TO THE METAL TRADE.

FOR COPPER, TIN, LEAD, &c., apply to-MESSES, PELLY, BOYLE, AND CO., SWORN METAL BROKERS, ALLHALLOWS CHAMBERS, LOMBARD STREET, LONDON. (ESTABLISHED 1849.)

The Mining Market: Brices of Metals, Ores, &c.

25 777 A	F MARKET LOSDON Supp. 7 1877
	L MARKET-LONDON, SEPT. 7, 1877.
IRON. & s. d. & s. d	
Pig, GMB, f.o.b., Clyde 2 14 6-	English, ingot, f.o.b 68 10 0- 69 0 0
, Scotch, all No. 1 2 16 0- 3 10 0	
Bars, Welsh, f.o.b. Wales 5 10 0- 5 13 6	Australian 63 15 0-
in London, 6 0 0 - 6 2 6	Banca 68 0 0- 69 0 0
" Stafford., ", 7 10 0- 8 15 0	Straits 65 0 0
in Type or Tees 5 10 0- 6 0 0	
Bwedish, London 9 10 0-10 0 0	COPPER,
Rails, Welsh, at works 5 0 0-5 5 0	Tough cake and ingot. 73 10 0- 74 10 0
Railway chairs	Beat selected 76 0 0
spikes	Sheets and sheathing . 78 0 0
Sheets, Staff., in London 8 15 0- 9 0 0	Fiat Bottoms 81 0 0
Plates, ship., in London 7 5 0- 7 10 0	Wallaroo 80 10 0
Hoops, Staff 7 12 6- 8 0 0	
Nail rods, Staff. in Lon. 7 5 0- 7 12 6	
STEEL.	Chili bars, g.o.b 67 5 0- 67 10 0
English, spring16 0 0-20 0 0	PHOSPHOR BRONZE.
, cast 35 0 0-45 0 0	Bearing metal £112 0 0
Bwedish, keg16 0 0	Other alloys 2120 0 0- 140 0 0
10 fag. ham17 10 0	
LEAD.	BRASS.
English, pig, common . 20 0 0	Wire 8d
L.B. nom.20 50	Tubes10
W.B21 0 0	Sheets 9
sheet and bar21 0 0-21 5 0	Yel, met, sheath, & sheets, 634 - 714
nine	Nails composition 834 - 934
red	
white	TIN-PLATES.* per box.
patent shot24 10 0	Charcoal, 1st quality 1 26-1 36
Spanish	,, 2nd quality 1 10- 1 16
	Coke, 1st quanty 0 19 6-
QUICKSILVER.	,, 2nd quality 0 17 6- 0 18 0
Flasks of 75 lbs., ware. 7 17 6-	Blackper ton 16 0 0- 16 10 0
SPELTER.	Canada, Staff. or Gla., 12 0 0-18 0 0
Bilesian or Rhenish 19 5 0- 19 10 0	
English, Swanses 21 0 0	Black Taggers, 450 of lean and
Sheet zinc 22 10 0- 24 10 0	14 × 10
	loss for ordinary . 10s non ton less for

*At the works, is. to is. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IO quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—As long as political affairs continue to exercise such important influence over commercial affairs it will be found necessary to follow the course of the former quite as much as that of the latter, for we must first see an improvement in politics before we get an impeovement in business, and as there is no prospect of any

important influence over commercial affairs it will be found necessary to follow the course of the former quite as much as that of the latter, for we must first see an improvement in politics before we get an impeovement in business, and as there is no prospect of an immediate recovery in trade. The depression, however, is not entirely owing to the war, entitled in the sea, although that doubtless is the principal cause of its prolongation, for the war, although that doubtless is the principal cause of its prolongation, for the sea, although that doubtless is the principal cause of its prolongation, for the sea, although the sea of Europe must have changed for the better, but as yet there are no signs of a favourable change. The war may be extended in area, and to an indefinite length, and the ensuing French elections may be that there are no signs of a favourable change. The war may be extended in area, and to an indefinite length, and the ensuing French elections may be that the three can be no relief, consequently the markets will remain unsettled, and it seems as if there was no alternative but to quietly look on and wait the issue of events. Those who are able to at attli will, no doubt, do se, but there are many who cannot afford to wait, and they of the collection of the serious of t

to assist the fall. Holders may temporarily withdraw from the market, but that will not create a demand, as buyers would not be influenced by any such action, for they cannot afford to pay current prices, and they will simply wait until business becomes practicable, and holders will only make matters worse by not readily meeting the wants of the market. The demand seems to have gone off all at once very considerably, and something must be done to stimulate it afresh; but how this can be effected it is difficult to conceive unless prices are greatly reduced, which will probably have to be done conceive unless prices are greatly reduced, and as charters are beginning to increase again, there being 1900 tons announced for the latter part of August, it shows that present rates are not having much effect upon production. The stock of Chill bars at the end of last month in Liverpool and Swansea had increased to 18,282 tons, and there will be a greater increase shortly if the cessation in the demand for manufactured is to last much longer, and we fear it will, for it must be tempting prices indeed to induce buyers to come forward just now. The home trade is slack, and orders for Turkey and Russia are very limited, and for India there is nothing doing. Merchants will require sheets to be 754 or 764 before they begin shipping again in any large quantities, but these prices are too low for smelters to entertain at present. The stock in

Havre is 7916 tons, against 5675 tons on Aug. 31, 1876, annd the only way to clear some of it off is to reduce prices.

Harre is 7916 tons, against 5675 tons on Aug. 31, 1376, annd the only way to clear some of it off is to reduce prices.

Importers have not taken warning in time, but have been bringing in supplies without reference to the decline in trade. The consequence is that the markets are overdone, and the best thing they can do is to let the ameliters have aconsiderable portion of it at a low price, that they may be able to work it up, and give relief to the market. We only wish importers had followed our suggestions long ago, for all parties would have benefited then, but every month seems to bring the market to a lower level, and of course makes it so much the worse for holders. We may have been considered unfavourably disposed to importers by recommending realizations of large quantities below cost price, but now that the price is so much lower, not carried to the contract of the contrac

effect large sales sellers would have to submit to further concessions; prices, however, have now receded to such a figure that business ought to increase, as the price cannot stand in the way of business, and there is no doubt that buyers would be content with sions; prices, however, have now receded to such a figure that business ought to increase, as the price cannot stand in the way of business, and there is no doubt that buyers would be content with the reductions that have already taken place were it not for the lower prices still rading for Belgian iron. Belgian bars can be bought at \$3.75, 64, to \$5.10s. delivered in the Tames, whereas Welsh bars are 10s. per ton dearer, and North of England are mostly quoted above that rate. The Belgians have succeeded so well in getting their iron taken by buyers that many will not take English as long as they can obtain Belgian at any cleaper rate, and unless the English masters are going to remain indifferent to the loss of this portion of the trade it seems as though they would ultimately have to modify their prices more in conformity to those of Belgium. The common bar and nail rod trade is an important branch, and should not be relinquished without a struggle to retain it, but go it will, and that forever, if masters do not bestir themselves in the matter, and outdo the Belgians. It seems a very trifling matter to arrive at, for it could be easily ascertained how it is that Belgium sells iron delivered here cheaper than it can be sold by our own makers; if the Belgians selling below cost price there is an answer to the question at once, and we know that there must soon be an end to that sort of business, but from their eagerness to secure orders at current rates we doubt very much whether they are making any sacrifice, and if they are not then we ought to find out quickly in what respect the difference lies that the one country of the difference in the cost of production but freight and insurance and other charges to be borne, but notwithstanding all these yet Belgium iron can be delivered in the Thames cheaper than English. Now, the first tondictain for the trade is in what manner this is done, for it is far better that it should be known, even though the remedy be beyond our control, and if obliged to surrender our cl

Decrease
Total increase for 1877.....
FURNACES.

71. 17s. 6d., and would, probably, not refuse 7l. 15s. for a few hundred bottles.

TIN.—The next public sale in Holland of Banca will be held on the 26th inst., and consist of 21,500 slabs, and 3500 slabs Billiton. The advices from Rotterdam do not give a very favourable account of the market for the past month. Although there was a fair demand for consumption, yet prices continued weak and declining; and upon a slightly favourable turn near the close of the month sellers manifested eagerness to avail themselves of it, consequently the market closed flat. The New York market is also reported quiet, and prices nominal. Banca, 17½ c.; Straits, 15%cc; English, 15c. In the absence of buying, the arrivals of tin were being stored. Our market has not shown any particular change during this week, and prices of Straits have ranged between 64. 10s. and 634, in ad Australian about 634. Is. The actual stock of tiu again shows a slight increase for August, and the deliveries being less than in July prove that consumption is rather diminishing. The reduced price has had no perciptible effect at present on supplies from the Antipodes, and it is not generally expected that any sensible impression will be made. From all accounts there is an abundance of tin there, sufficient to last for years, even at the present rate of supply, and the working expenses hitherto have been comparatively trifling, and it appears that they can drive a large trade and have a good profit attached to it yet. There is no doubt 60l. per ton is a noble price to formerly. We should very soon find a marker for the increased supply; it is only a matter of price, and if the Australians can afford, and are willing to give us the benefit of a cheap metal they need not fear but what we can take all they can give. In a short time the wool shipments will be coming on, when tin can be shipped at a mere ballast rate; and, if the quantity should happen to be in excess of that which we have been hitherto receiving, the market will be doomed, and holders will only a hundred bottles.

THE IRON TRADE-(Griffiths's Weekly Report).-Friday Evening. At Glasgow the market has been quiet during the week. On Tuesday a moderate business was done, and prices touched 54s. 9d., but have relapsed again slightly during the last few days, and close this day a moderate business was done, and prices touched 54s. M., but have relapsed again slightly during the last few days, and close this evening 54s. 6d. sellers, about 2d. per ton below the price last week. It will be seen from our usual quotations of maker's No. 1 fron that the prices of Gartaherrie and several other brands have been reduced. Gartaherrie, 62s. ¢ Coltness, 67s. 6d.; Calder, 62s. 6d.; Langloan, 64s. 6d.; Summerlee, 60s.; Moakland, 55s. 6d. f.o.b. Glasgow; Glen armonk, 60s. 6d. f. Eglinton, 5fs. f.o.b. Ardrossan; Shotts, 61s. 6d. f.o.b. Leith; Kenniel, 56s. 6d. f.o.b. Bo'ness. Sufficient time has not yet elapsed since the official change in the price of marked Staffordshire bars, to enable us to form an opinion as to how far the reduction will stimulate demand. The change will, no doubt, lead many continental and colonial consumers of English iron who have latterly been using North Country brands to specify for Staffordshire from now that the difference between the prices of the two districts is 10s. less than it was before the reduction. The Director General of Stores for India has intimated to-day that he is prepared to receive tenders for the supply of \$400 tons of from, or \$600 tons of steel rails, and about \$600 tons of accessories. At the Birmingham Exchange yesterday the attendance was somewhat smaller than usual. There is a slight improvement in the finished from trade of the Black Country. In the pig iron trade, however, there is no change. The Cleveland from trade is somewhat unfavourably influenced by the publication of the official statisties, which are not so satisfactory as was anticipated. Prices were slightly easier towards the close of the meeting at Midlesborough, on Tuesday, Barrow and the West Coast continue in the same healthy state which has happily characterised the district for some time past. There is a somwhat improved feeling in the tin-plate trade, but prices are unmoved at present. During the first seven month to fail guerner 75,381 and in 1875, 85,312. In the metal m

Mesers Viviax, Younger, and Bond—Copper: There is nothing especial to remark in the undernoted figures. The consuming trade is scarcely so good, and the war in Europe, together with the famine in India, would account for that being so. The result is, however, that buyers take nothing beyond their necessities; and as now the smelters are getting more ores from various sources, and are taking the opportunity to buy them at moderate rates, and the Chili importers too are making purchases shored freely at prices which induce them to seek buyers here at quotations, the article has been much offered, and the price for the month has fallen over 2 per cent. The charters for the first fortight tof the mouth were equal to 1400 tons in pure copper, consisting of 750 tons bars and 350 tons ores and regulates for England, and 300 tons bars for the Continent; those for the last half of the

month were 1900 tons in pure copper, made up of 1400 tons hars and tons ores and regulus for England, and 200 tons hars for the Continuations ores and regulus for England, and 200 tons hars for the Continuation of the Continua

hair of August, 100 in ours and nigots, coolin ores and regulas for Eag 300 tons bars for France.

Messrs. P. Sanford and Co.—The metal market has been very quied rate demand. The reduction dating from Sept. I in the price of market demand. The reduction dating from Sept. I in the price of market demand. The reduction dating from Sept. I in the price of market demand. The reduction dating from Sept. I in the price of market demand are considered to the sept. I in the price of market demand are considered to the sept. I in the price of the sept. I in the sept. I

The condition of the MINING SHARE MARKET might alm

The condition of the MINING SHARE MARKET might almostereotyped from week to week—"there is nothing doing, no coveries being made, no great improvements taking place, and quotations are merely nominal." How long this state of sfiding fined to speculations, but extends to every kind of business, trade. Peace would revive trade, and restore confidence. A sand startling discovery would stir up mining, and that yourself and startling discovery would stir up mining, and that yourself and startling discovery would stir up mining, and that yourself as that centred in the Carn Brea and Tincroft accounts, which bear out all we have said about them for many years past. (Breas are weaker, and leave off 19 to 21. At the meeting on F. last the accounts were brought up to the end of July, and there a debit balance of 28,2011. The total costs charged were 35,7 returns, including tin, copper, and arsenic, 10,7011. The bust charges, commission, and interest on advances are 29331. As this heavy debt the purser stated that there were 300 tons of its stopes and passing through their hands, which he estimated to out calculating the costs in making it marketable) at 11. He also estimated the machinery and plant on the mine st 20 tons of tin per quarter. as the agent hopes to increase the production, so he also hopes to out this large balance by the proceeds of the mine. Timesic out this large balance by the proceeds of the mine. Timesic out the started that the proceeds of the mine. Timesic out the started that there were 300 tons of the mine. Timesic out the mine started the mine. Timesic out the mine started the mi

of 64, and a debit balance of 5354.

Among COPPER MINES Devon Great Consols are quoted 3; owing to the lowness of the copper standard it has become sary here to reduce the production of low-priced ores as map possible. The sampling on Friday was 1023 tons. West 72½ to 77½. Wheal Crebor, 1½ to 2; the lode in the 120 east is 204. per fathom, and opening out well. The stope in the balance of the control of the The ore dressed towards the next sampling is from 180 to of ore. South Caradon, 100 to 110. Parys Mountain have to \(\frac{1}{4}, \frac{3}{8};\) the mine is improving, but shares have declined, the shareholders not coming forward as it was expected to Morfa-du. East Caradon, 1 to 3: Marke Valley, 2 to 1; P. Wales, 1 to 1.

LEAD is firmer, and the rumour is that both Russia and To LEAD is firmer, and the rum our is that both Russia and rare in the market for it; the former with an order for 100 this week. If this be correct we may look for an advance ore. Roman Gravels, 9½ to 9½; Tankerville, 6½ to 6½; Grat 120 to 21; North Laxey, 14s. to 16s. Glenroy, ½ to 1½; a tell states that the lode in the shaft, which is 6 ft. wide, has sublende coming into it; the 25 end south is improving, and the yielding lead and blende to pay. Rookhope, ½ to 1; the meale of lead (40 tons) realised 111, 11s. 6d. per ton. Leadhil to 5½ van 30 to 324.

sale of lead (40 tons) realised 11½, 11s. 6d. per ton. Leading to 5½; Van, 30 to 32½.

East Van, 4½ to 5; the 40 cross-cut has been driven 8 fms. Chiverton, 12 to 13; West Craven Moor, 10 to 12; West Tanket ½ to 1½; East Craven Moor, 10 to 11; Aberdaunant, ½ to ½; Dyliffe, 3 to 4; Ladywell, ½ to 1½; Ladywell pref. (10s. paid); Herodsfoot, 5½ to 5½. Pateley Bridge, 2 to 2½; the agent looks great improvement in the 30 east, which is approaching the run of ore ground left by the old company going down und 20, and said to be 18 in. solid lead. The production of piges 40 and said to be 18 in. solid lead. The production of piges 40 and said to be 18 in. solid lead. The production of piges 40 and said to be 18 in. solid lead. The production of piges 40 and said to be 18 in. solid lead. The production of piges 40 and 5 to 5½ couth Roman Gravels, 10s. to 15s.; West Assheton, ½ Denbighshire, 1 to 2. Gorsedd and Merllyn, 5½ to 5½; Great Herods 15½; Great Herods 1 Llangwat, 2 to 24.

Llanrwat, 2 to $2\frac{1}{2}$. Argentine, $2\frac{3}{4}$ to $3\frac{1}{4}$; Blue Tent, 3 to $3\frac{1}{4}$; Condes, $2\frac{3}{4}$ to $3\frac{1}{4}$; fall, $5\frac{3}{4}$ to $6\frac{1}{4}$; Cape Copper, 37 to 39; Don Pedro, 9a, to lla; hardt and Aurora, $5\frac{1}{2}$ to $5\frac{3}{4}$; Exchequer, 4a, to 6a; Flagstaff, $2\frac{3}{4}$; Frontino and Bolivia, $2\frac{1}{4}$ to 3; Last Chance, $\frac{1}{8}$ to $\frac{1}{4}$; Quebrada, $2\frac{3}{4}$ to 3; Pestarena, 4a, to 6a; Port Phillip, $\frac{3}{8}$ to $\frac{1}{4}$; mond, $4\frac{1}{4}$ to $4\frac{3}{4}$; St. John del Rey, 290 to 310.

The Market for Mine Shares on the Stock Exchange has somewhat more animation, and prices are better mains although it is only in very few instances that any actual adva quoted. Amongst the exceptions may be mentioned Polly which has advanced fully 11., the present quotation being 25 and New Quebrada, the present quotation for which is 25 Cape Copper has been stronger, and closer prices are quote there has not been any large amount of business doing in Flagstaff and Frontino and Bolivia have also slightly and whilst Eberhardt and Aurora have receded. It has frequently Flagstaff and Frontino and Bolivia hare also slightly aim whilst Eberhardt and Aurora have receded. It has frequently remarked that if there is a lack of business principles in the agement of mines there is an utter absence of them in the is ment of meetings, and a proof of this was afforded at the most of the Ladywell shareholders on Thursday, where nearly two were consumed in attempting to do business which need no occupied 20 minutes. The shareholders who brought forest informal resolution being totally ignorant of the contents of own Articles of Association, and the Chairman and managing rector, either from an effort to be over-courteous or from the knowledge of the rules of public meetings, suffered the intose who had any business to attend to to be wasted by mitting the meeting to break up into friendly little group the discussion of matters in a private and desultary matter than the more than six directors, and that their remunerations and the contents of the articles provide that there shall be not less than the more than six directors, and that their remunerations are the state of the

n. 8 divided as the directors think fit. Since the premuls to be divided as the directors think fit. Since the premuls to wo directors had been nominated in the usual way seting two directors from five to three, and making a corremant were submitted. An amendment was proposed for remain were submitted. An amendment was proposed for remain were submitted. The Chairman properly ruled gradient could not be put as the alteration proposed could sume be calling special meetings and passing special resoluming the Articles of Association; the Articles of course exeming the Articles of association; the Articles of course exeming the Articles of course quality and the second section of the Articles of course exeming the articles of course quality and the second section of the Articles of course exeming the articles of course quality and the second section of the Articles of course exeming the changes are to be made. Let it be assumed, as is ing the Articles of Association; the Articles of course ex-ing the Articles of course ex-ing the changes are to be made. Let it be assumed, as is the change is desirable, as the directors are to fact, that the change is desirable, as the directors are to propose of the concern whilst the other shareholders to be a supplementation for wasting time. ting and still there can be no justification for wasting time times, and still there can be no justification for wasting time timoring generally accepted rules. Precisely as every man risporting be acquainted with the laws of his country, and is good to be infringement, so every shareholder is supposed if or their infringement, so every shareholder is supposed and those who are without the companies updated and those who are without the minted with the Arterosa diple is connected, and those who are without that neces-diple is connected, and those who are without that neces-diple have no right to waste their co-shareholders' time sledge have no right to waste their co-shareholders' time sledge have no right to waste their co-shareholders' time sledge have no right to waste their co-shareholders' time

pledge have no right to waste their co-shareholders time gilheir own peculiar notions upon the meeting, and chairgually at fault if they so far lose control of a meeting as such annoying irregularities to occur. Such annoying irregularities to occur. Such annoying irregularities to occur. The such annoying irregularities to occur. The such annoying the month, and visible gold obtained. There is glow of good stoping ground ready to break, some of shoms of good stoping ground ready to break, some of the west the lode splits into three branches, all of which her west the lode splits into three branches, all of which her west the lode splits into three branches, all of which her west the lode splits into three branches, all of which her west the lode splits into three branches, all of which her west the lode splits into three branches, all of which her west the lode splits into three branches, all of which her west the lode splits and the same character as last month. In a stope In No. 7 they have continued taking on a stope being of the same character as last month. In a stope being of the same character as last month. In a stope if the 5 fm. level some good stones of visible gold have aring the month 687 lbs. have been crushed in the from which 80 czs. amalgam were obtained, yielding ld weighing 25 czs. 11 dwts.

al Rev. 290 to 310; the latest telegram received from a Rev. 290 to 310; the latest telegram received from the second division, 12 days of

of gour way, 290 to 310; the latest telegram received from in del Rey, 290 to 310; the latest telegram received from a state that the produce for the second division, 12 days of states that the produce is small, 10th per ton. It is explained that the produce is small, 10th per ton. It is explained that the produce is small, 10th per ton. Don Pedro, \$\frac{3}{2}\$ to \$\frac{1}{2}\$; the detail of the tother than the mine captain's letter of Aug. 4. State of the previous day a large run occurred in Vivian's while two Englishmen, with five assistants, were employed. This two Englishmen, with five assistants, were employed. ne, about 20 fms. below summit, a loud noise was heard en at once left the shaft and came down and informed The men at once left the shart and came down and informed stattle mine. They at once went in the mine and found that he shall shall shall come down the shaft and encountered with per and stuff had come down the shaft and encountered with maping machinery. A force was sent to Alice's to cover over ineed of shaft, but when they arrived they found that the old made stuff had formed a choke. On the morning of the 4th it was examined, and it was found that only about 12 fms. as let open from the summit down. Therefore they believe shaft is filled from the back of Alice's, which will make that they do not know which part of the shaft failed first, but they do not know which part of the shaft failed first, beard Bolivia. 28 to 34: the June profit was 4692 8a. 8d. they and Bolivia. 23 to 34; the June profit was 469i. 8s. 8d., and Bolivia. 8t. has been expended on capital account. for the 11 months ending June 20 appear to have been controlled in the some has probably been expended on the some has probably been e to for the 11 minutes sharing of the 11 minutes of the 12 minutes to he users, and to the fact that this monute retains the pissany gold from the Silencio or Palmichala Mines, the think that the profit for the month may be considered at the profit for the month may be considered at the profit for the month may be considered. Powder has at last been obtained for Antioquia at the factors had contemplated subfactory. Powder has at last been obtained for Antioquia and aload ent up by mail. The directors had contemplated a squaral meeting of the shareholders immediately after the of the present mail, but owing to Mr. Robert White's absence mines, no report from him can be received until the next it is, therefore, proposed to hold the meeting during the

aut. 34; important advices are expected by the Pacific denext week. The latest accounts state that the yield of in the bottom of the mine had increased, and in the season my is now entering upon there is considered to be a pro making large profits.

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e nearly twe hich need nor rought for e contents and manages or from the wasted to little ground the masted to the

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making large profits.

und, 4½ to 4½; no report from the manager has reached the
officethis week. The last telegram received states: "Nothing
tweek. Judge Field absent." This relates to the delay in
un from the judges the grounds of their decision. Flagstaff ing from the judges the grounds of their decision. Flagstaff hiere declined, and close 2\frac{3}{2} to 2\frac{3}{2}; the drop in price is attribralisations on behalf of those who attach importance to immade against the company by Mr. Davis. Last Chance, it has shares have been enquired for since the publication (buinman's report, which states that satisfactory arrangements been made with Mr. Davis regarding his claim. Under judismagement, the Chairman says, the company should hencestute a sound and paying basis, with the prospect of early with the pressing liabilities are small, amounting only to another than the prospect of early with the prospect of early wit A meeting of shareholders is to be held at an early date. 3 to 31; the discovery recently made at this mine has a snewed demand for these shares; the exploration has been dalready for 50 ft. in length, and the vein has widened out some of the ore yields \$600 per ton, and the average is cal-

lic or Gold Washing Shares there has been an entire produce or both washing shares there has been an entire of business, and quotations remain about the same. Birdsmid 45 days, and that the gross returns are \$15,000, leavmid 68500. This is considered very good, and would inmidter gravel. No doubt is entertained that with plenty of
discoming season very good results will be obtained. Blue
15 3; the agent telegraphs that they have had a good
midter for the Suith Yuha and used it to a very good adby the agent telegraphs that they have had a good ad-bethinks and intends to run until the water fails before the thinks and intends to run until the water fails before the At Blue Lead they are working all the hands they the action of the telegraphy of the South Yuba claim. Is commenced cleaning up the log flumes in the Enter-phy, which he believes will yield a fair profit. All, 5] to 64; Capt. Waters estimates that the average ore bottom of the mine would yield 75 per cent. of dressed 50 per cent. of blende, and 25 per cent. of lead. Machinery exceted to treat 60 tons per day, which it is thought will

le bottom of the mine would yield 75 per cent. of dressed disperent. of blende, and 25 per cent. of lead. Machinery greeted to treat 60 tons per day, which it is thought will sold from 3000! to 4000!. per month.

Mines have been tolerably active. Van, 30 to 32; the 105 simproving, the end now being worth 12!. per cubic fathom; as end east is looking well, but the work is interrupted by stands of water, always looked upon as a good sign. No resembers, Grogwinion, 2½ to 3½; the mine is reported to signot quite so well, the lode in the deep level having temitable off. Wye Valley, 3 to 4; the new ground east of the mines to open up remarkably well, and prospects increase sloping great deposits of ore at this point. The new shaft is pushed down with vigour, and will soon reach the depth at important discoveries were male some time back, and where discoveries are now looked for. West Wye Valley, 2½ to 3½; when time yet before the dressing machinery can be combined to the discoveries were made some time back, and where a stand we have the desaper and the desaper and the desaper and the same time yet before the dressing machinery can be combined by the stands of the dressing machinery can be combined by the same time yet before the dressing machinery can be combined to the desaper and the discovering of the various levels. The dressing machinery duty duite inisited. St. Harmon, 2½ to 3½; prospects at this and the other levels look favourable for further the lack, 1½ to 2½; in about 10 days the crusher is extended to the second the standard of the crusher is extended to the second the standard of the crusher is extended to the second the standard of the second the standard of the crusher is extended the second of the

desired, and yielding some very fine ore. Llanidloes, 1½ to 2½: the main shaft is being sunk below the 84 in very favourable ground. The lode in the deep workings is looking better than at any other point in the mine, and some splendid lead has this week been raised from the bottom of the shaft. Prospects were, is is said, never better or and of the shaft.

rom the bottom of the shaft. Prospects were, is is said, never before so good of opening out a rich mine in depth.

Pateley Bridge, 2 to 2½; the 30 east, on Rake vein, is rapidly approaching the rich run of ore ground left by the old company—reported to be 18 in. wide, solid metal. The 30 west, on same vein, is also looking exceedingly well. Other parts of the mine unchanged. Smelting going on steadily, and 25 tons pig-lead in store. West Pateley, 1½ to 2; several improvements are reported this week, and occasional stones of ore are being met with in the 55 fm. level, on the Craven Cross vein, as the end is extended under the old workings, where it is reported that the lode went down visiding 3 ft of ings, where it is reported that the lode went down yielding 3 ft. of solid lead.

nge, where it is reported that the fode went down yielding of it, or olid lead.

Subjoined are the closing quotations:—
Asshetos, I to 1½; Cara Bres, 17½ to 20; Devon Great Consols, 3½ to 3½; Doloth, 21 to 23; East Garadon, ½ to ½; East Van, 4½ to 4½; Glenroy, 1 to 1½; Pilyn, ¼ to ½; Great Laxey, 20 to 21; Hingston Down, ½ to ½; Leathills, 5 to ½; Marke Valley, ½ to 1½; Pary Mountain, 3.16ths to 5.16ths; Pateley Bridge, to 2½; Pennerley, ½ to ½; Penstruthal, 4s. to 6s.; Homan Gravels, 9½ to 9½; hankerville, 6¾ to 6½; Van, 30 to 32; Van Consols, ¾ to ½; West Tankerville, ¾ to 1; West Chiverton, 10 to 12; West Pateley, 1½ to 2; West Tankerville, ¾ to 1; West Ghiverton, 10 to 12; West Pateley, 1½ to 2; Cape Copper, 37 to 39; Pedur Greek, ¾ to ¾; Blue Tent, 3 to 3½; Cape Copper, 37 to 39; Pedur Greek, ¾ to ¾; Chontales, ¾ to ½; Eberhardt and Aurora, 5½ to 5½; Schequer, ¾ to ¾; Chontales, ¾ to ½; Eberhardt and Aurora, 5½ to 5½; Schequer, ¾ to ¾; LX.L., ¼ to ¾; Eberhardt and Aurora, 5½ to 5½; Schequer, ¾ to ¾; LX.L., ¼ to ¾; Eberhardt and Aurora, 5½ to 5½; Schequer, ¾ to ¾; St. John and Bolivia, 2% to 3½; Hultafall, 5½ to 6½; Javali, ¾ o ½; Kapanga, 1 to 1½; Last Ghance, ¾ to 1½; Now Pactife, ½ to ¾; New Quebrada, 2½ to 3; Pestarena, ½ to ½; Plumas Eureka, 2½ to 3½; Port Phillip, ½ to 5½; Richmond Consolidated, ¼ to 4½; St. John del Rey, 290 to 310; San Pedro, ¾ to ½; Chillery shapes have been attracting more attentation.

Teooms, it to it; United Mexican, 1½ to 2; South Aurora, 3 toths to 5-16ths; Teooms, it to ½; United Mexican, 1½ to 2; Tuncroft, 9 to 10; Oregan prest, 4 to 4½.

COLLIERIES.—Colliery shares have been attracting more attention, though only in a degree insufficient to produce any very material change in prices. Increased enquiries for this class of investment have, however, rendered prices firm, and prove that renewed attention is being directed to investments which must at present prices turn out very profitable. The coal trade throughout the kingdom shows signs of improvement, which is now likely to continue, and the iron trade has taken a favourable turn. We hear that considerable orders for steel rails have been lately put in hand for the Indian Government, and the demand for this and other forms of iron are now coming in from sources to which for some time past no manufactured iron has been sent. The northern coal fields are gradually becoming more busy, owing to improved demand for all qualities, especially house and gas coal. The arbitration in the Northumberland dispute has been completed, and the award is in favour of the miners, whose wages will consequently not be reduced. In the Swansea district the export demand continues good, and the general improvement in the trade of the neighbourhood is very marked. The collieries and ironworks formerly worked by the Yuisgedwyn Company have been recently purchased by a strong London firm, who will probably form a company to work the property. As the purchase appears to have been made on very favourable terms it is tolerably certain that by whomever this valuable property may be worked it will return very handsome profits.

We are glad to hear that the Thorp's Gawber Company are looking up again a

property. As the purchase appears to have been made on very involutable terms it is tolerably certain that by whomever this valuable property may be worked it will return very handsome profits.

We are glad to hear that the Thorp's Gawber Company are looking up again a little. The directors' report, just issued, recommends the payment of the dividend on the preference shares for the pat-half year, and this is a move in the right direction. The shares remain at about 2 ½. Newport Abercarne are at 3 to 3½; the sinking is progressing rapidly, and the second shaft is expected to reach the Black vein before the end of the present mouth. Chapet House are firm, at about 3; the sinking of the new pit is proceeding well, and business is much improved, even though it has been so satisfactory throughout. The sales of coal at Alltami have lately been largely increased, and the general progress is good. The shares close at 4 to 4½. The Nerbudda Coal and Iron Company have, with the sanction of the Court of Chancery, reduced their capital from 250,900.to 150,0004, the shares having been consolidated at 34, with 22 per share paid up. Messrs A. Good and C. F. Finney have been appointed official liquidators of the Oakham Colliery Company. Mold Argoed are at 3 to 3½; Llay Hall, 9 to 10; Cakemore, 1¼ to 2½; Cardiff and Swansea, 1½; New Sharlston, 3 to 3½.

At Redruth Ticketing, on Thursday, 2027 tons of copper ore were sold, realising 8297.11s. The particulars of the sale were—Average standard, 86. 18s.; average produce, $7\frac{1}{8}$; average price per ton, 4. 2s.; quantity of fine copper, 159 tons 13 cwts. The following are

the particulars:—
Date. Tons. Standard.
Aug. 2, 1268 £ 90 14 0
, 23, 2670 94 16 0
Sept. 6, 2027 86 18 0 the particulars:—
Date. Tone. Btandard. Produce. Per ton. Per unit. Ore copper.
Aug. 2. 1289 £ 90 14 0 8 £ 4 9 6 11s. 2½d £66 2 0

"23. 2670 94 16 0 6 3 2 6 10 5 52 0 6

Sept. 6. 2027 86 18 0 7½ 4 2 0 10 5 51 19 0

Compared with the last sale, the decline has been in the standard 11. 78., and in the price per ton of ore about 2s. 6d.

The Nerbudda Coal and Iron Company announce that under a special resolution, and with the sunction of the High Court of Chancery, the capital of the company has been reduced from 250,000%. to 150,000%,; also that the shares have been consolidated, and now stand as 3% shares, with 2% per share paid up thereon.

With this week's Journal a SUPPLEMENTAL SHEET is given which contains—Original Correspondence: Rock-Boring Machinery—No. VI. G.J. Darlington: Californian Stamps; Stamping Machinery (S. H. F. Cox, J. Patterson); Practical Mining—Stamping Machinery (S. H. F. Cox, J. Patterson); Practical Mining—Stamping Machines (J. Wilkins); Mining in the East—No. XX; Pern, and the Silver Mines of Cerco de Pasco (W. R. Rutter); Hydraulic Gold Mining—a Suggestion; Colliecy Working—the Suspension of a Manager's Certificate; Colliery Manager's Association: Limited Liability; "Copper Mining" as an Investment (R. Tredinnick); Lead and Lead Mining (R. Tredinnick); Carn Brea and Tincroft Mines; Mining in Cardiganshire (A. Francis); Penstruthal Mine; Wheal Grenville; Mining to Cardiganshire (A. Francis); Penstruthal Mine; Wheal Grenville; Treleigh Wood Mine; Profitable Investments (T. J. Barnard); the late Mr. Ennor: Heavy Premium for Mines (J. Bunyan); Mines with several Aliases—Last Chance Silver Mining Company of Utah—Almada and Tirito Consolidated Silver Mining Company of Utah—Almada and Tirito Consolidated Silver Mining Sompany—Royal Exhibitions—Half-Yearly Foreign and Colonial Mining Share-List (E. Ashmead); Improved Elevator—Patent Matters—Meetings of Argentine, Lrdywell, South Condurrow, West Pateley Bridge, and East Van Companies. &c. With this week's Journal a SUPPLEMENTAL SHEET is given

Mr. J. H. MURCHISON, F.R.G.S., and Capt. R. WATERS, have re Mr. J. H. MURCHISON, F. R. C. S., and Capt. R. WAIRRS, have returned this week from Norway, where they have been examining some very valuable copper mines, which have already yielded, and are still giving, large returns and good profits, though no capital has hitherto been expended upon them. In connection with the mines there is a very extensive freehold property covered with valuable timber, more than sufficient for fuel for engines and for mining purposes. Capt. R. Waters is brother to Capt. A. Waters, the manger of the Tankerville, Roman Grayels, and Leadhills mining purposes. Capt. R. Waters is brother to capt. A. Waters, the manager of the Tankerville, Roman Gravels, and Leadhills Mines, and he (Capt. R. Waters) is well known as a practical man of extensive and varied experience, possessing also a sound and cautious judgment. His report on the above property is, therefore, looked for with unusual interest, and will deserve the importance which is certain to be attached to it.

WEST PATELEY (Lead).—Some important improvements are reported this week, and in the 56 fm. level a cross-vein has been discovered, carrying a small leader of lead ore on the footwall. The Craven Cross vein now produces occasional stones of lead ore—an encouraging feature to present itself as the end approaches the perpendicular of the rich ore body gone down in the old workings. The Rake vein in the bottom of No. 2 shaft has increased in value, now worth 30l. per fathom. The discovery vein in new shaft has also much improved; at the date of the recent meeting it yielded stones of lead ore; it is now worth 10l. per fathom; and the lode in No. 1 shaft, in the 10 each has improved from a mixture of lead ore to 5 cwts. per fathom. The crusher is completed, and the waterwheel for working it will be on the mine next week. Smelting will be commenced very soon. will be commenced very soon.

FRONTINO AND BOLIVIA.—The directors have received advices, renorms AND BOLLVIA.—The directors have received advices, under date July 12, accompanied by a remittance of gold valued at 14,580\(\ell\), the produce of the mines, and for gold purchased at the mines, for the 11 months ending June. The profit for the month is 460\(\ell\), a most favourable result, when it is recollected that no return has been made for the company's richest mines, Silencio and Palmichala. Of the above remittance 12,000\(\ell\), has been received by the chala. Of the above remittance 12,000, has been received by the company's bankers to provide for the cost of the last 11 months. The Silencio Mine has been unwatered, and by the next mail the directors hope that some of the rich ore from that mine will be included in the remittance. Looking at the disorganised state in which the revolution must have left the country, and to the fact that this month's returns do not comprise any gold from the Silencio or Palmichala Mines, the directors think that the profit for the month may be considered highly satisfactory.

CAPTAIN ABSALOM FRANCIS

ZINC ORES.

ARMAND FALLIZE, INGENIEUR-CIVIL, A LIEGE (BELGIUM

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5 Altsami.
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Colorado, £136.
Colorado, £136.
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profits for the last quarter are the largest made by the company, while the past fortnight's brewings are the largest ever made.

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11, Special Lead Mines have less of the six Editions, is.

"Contains a good deal of information that may be useful at present. Mr. Murchison's theory is briefly that on the average British Lead Mines have less of the lottery element in them than any others, and the figures he gives seem to support that view; at all events, those interested in this industry will find his facts and observations worth reading." Times.

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"We have great pleasure in recommending his treatise."—Morning Past.
"We invite capitalists to look into this means of investment."—Money Mark Review.

Notices to Correspondents.

Since inconvenience having arisen in consequence of several of the Numbers $r^{\dagger} = \sigma$ the past year being out of print, we recommend that the Journal should a $f_{\rm Loc}$ on receipt; it then forms an accumulating useful work of reference.

Bir.—I should feel thankful if any correspondent could inform me if anything it being some with the Aruba I-land Gold Mining Company's property. If they can, through the medium of your Notices to correspondents, they will oblige --ONE INTERESTED.

The letter of "Responsibility," on the suspension of Mr. John Newey's certificate at Dunley, shall appear next week.

at Dunley, shall appear next week.

Re sired, —"W. S. L." (Dublin) —"M. P." (Starcross): Shall be glad to hear again
—"W. T." (Dappagh) —"E. W. R."—"Shareholder" (New Quebrada) —"Con
stant Reader" (Manchester) —"Shareholder" (Van Consols) —"Merostor"
(Leeds): Yes—"Shareholder" (Wheal Gruville)—"Shareholder" (Carn Brea)
—"M. B."—"R. O"—"F. G. S." (New Quebrada): The letter can only appear
with the writer's name attached—W. Weston (Colorado): Next week.

THE MINING JOURNAL.

Bailway and Commercial Gazette.

LONDON, SEPTEMBER 8, 1877.

THE TRADE IN THE SUPERIOR METALS FOR TWO-THIRDS OF THE YEAR 1877.

There are certain periods of the year when persons interested in mines regard with enquiry and some anxiety the condition of the metal market, and especially the course of commerce in relation to it. One of those periods now occur; two-thirds of this year have passed away, the first autumn month has just expired, and all interested in British mines, as investors and workers, are desirous to ascertain what hope of an autumn trade, especially in tin, copper, and lead, have the transactions of the month of August afforded. The time of expectancy, doubt, apprehension, and hope has been long; not only has it filled up two-thirds of this year but the whole of last, and all concerned are asking what are our prospects? In our long experience of mining affairs we have never known the converge and hope of mining ment to be accontinuously surtained as our iong experience of mining anairs we have hever known the courage and hope of mining men to be so continuously suttained as during the dark dull season they have experienced. This has arisen from the conviction that the war alone prevents revival, and that there is some reason to believe it may pass away without a general conflagration, and without involving our own beloved country in the conflict. It has been often said war creates a demand for metals, and this ought to have done so, as it has been exceedingly wasteful. The irregular levies of Turkey on the one hand, and the Cossars on the other, never tire of useless firing, take little care of their arms, and, of course, some demand to supply the consumption has existed, and it must very much increase to replenish the nearly exhausted ar-

Summer very much increase to replents the hearly exhausted arsenals of the bethgerents.

But the universal alarm prevents business, and the expense for
armaments to which Europe has submitted deprives our customers
of the means of buying our metals for commercial, manufacturing,
and domestic purposes. Nations had large armies, now every
European is a soldier who can bear arms, every country is a camp,
but even in camp, march, bivouac, and barrack arms wear out, and ammunition is consumed and wasted, so that for military purposes ammunition is consumed and wated, so that for mintary purposes our superior as well as inferior metals will be wanted in large quantities. Of course, these considerations still sustain expectation, notwithstanding the decreased power of our customers to buy for strictly commercial purposes has diminished.

The statistics of the first month in autumn and of the first eight months of the year are here supplied, accompanied by such suggestions and comments as the situation calls for

tions and comments as the situation calls for.

tions and comments as the situation calls for.

Let us first notice the products of our tin mines, the oldest industry of the kingdom, older than agriculture itself in any of the forms to which we give the name. So much has the production of tin been identified with Britain, a fact rarely ever noticed may be stated, that the name of the country is derived from it; not as Hume and so many other historians have said, from the tints given to their bodies by the Britons, derived from certain pigments. When the Greeks discovered that Cornwall and the islands off its coasts supplied the Phoenicians with tin they found that the latter knew the country by the name of the Britannic Isles. The name is Phoenician, and Calic scholars recognise the word Britannia as describing "the land of metals." In Syriae the word Bratannia (from which the word Britannia is derived) means "the land of tin." The Greeks designated the Britannic Islend Cassiterides, as is plain from the writings of Strabo and Herodorus. This word is derived threes designated the Britannic lands cassiterides, as a plun from the writings of Strabo and Herodorus. This word is derived from Cassiteriots the Greak name for tin. In ancient maps the word Cassiterides is placed under Britain. It would appear now as if Britannia were transferred to the Antipodes, for Australia is becoming the great tin land, but many of our correspondents believe that with more economical mining and smelting the old Baratanac, or B itain, will still hold her own, however "New Britain," as it would be appropriate to call Australia, may flourish

or B man, will still not like rown, nowever "New Britain," as it would be appropriate to call Australia, may flourish.

Giving tin, therefore, priority of notice, we find that in the first month of the present autumn the imports were in all forms—blocks, ingote, bars, slabs, and regulus, of the value of 111,264. It will be observed by the readers of the Jurnal that the imports have declined in value for several years, not only from the low price obtainable in this market, but from decidely smaller quantities having been sent hither. In August last year the value was 121,880. For been sent hither. In August last year the value was 121,889. For the first two thirds of this year the value was 759,082. as compared with the same eight months last year, when it was 869.612. There is no novelty in the direction from which the imports came, but it may be observed that there is less fear in Cornwall of the competition with the Durch Settlements, of which the capital is Sumarra, and more apprehension than there has yet been of the rively of

tion with the Durch Settlements, of which the capital is Sumarra, and more apprehension than there has yet been of the rivalry of "New Bratannic" (Australia), as we have for the nonce termed it. This arises from the intelligence received of projects having begun there for mining, and not merely picking up stream tin.

Of the quantity imported the value of what was re-exported amounted in the month to 20,6711, and in the first two thirds of the year to 182,7961. The re-export has declined, but not to the same extent as the imports. Nevertheless stocks are heavy, and ho'ders hold on, "hoping against hope" for a rising market. In the two corresponding periods last year the values of re-export were respectively 21,1281 and 331,7501.

The exports of British tin were valued in August at 39 0111, and

The exports of British lin were valued in August at 39 0117, and in the eight mouth of last year at 28 907/ During the eight months the value was 304,528/... compared with 276,705/, the previous year This is an account of tin unwrought. in the same time. articles of tin, whether imported or the produce of Cornwall, is no novelty in the destination of what we have shipped. United States is still our best customer, and took two and a-half as much more from us this year as in the same time last. France, Germany, and Russia have, however, fallen off, particularly the first

Lead is a very old commerce of Britain. We learn from Scripture that the ships of Tarshish, a name given to England also that the ships were rather bringers of merchandise from Tarshish than ships of Tar-hish), supplied the markets of Tyre with "silver, tin, lead, and iron." Ezekiel describes Tarshish as a merchant (or trader) of (or with) Tyre. Now, it is very doubtful whether a "native" silver to be something which it was not; and in mixing coal the shipper most generously. The Phoenicians gave the name of Britanic to both islands, and there is abundant proof that they worked lead and copper unines in Ireland, the latter yielding gold and both yielding silver. There is unquestioned evidence of Phoenician enterprise in Ireland in the brazen swords and other implements of war and peace found in vestiges of mines wrought in a great antiquity. We know that the Roman worked lead mines in England and Wales, was ever discovered in Britain, but both in Britain and Ire-

digious, from 141,4767, to 231,2967.

The copper trade continues to represent the largest money value in connection with commerce in any of the superior metals. The imports are classified under the heads of ore—regulus, including precipitate, and unwrought, or part wrought. Of the first the value this year so far has been 759,9847,; last year in the same space of time 613,0687. Of the second in the same period 886,1237, and 828,3887. respectively. Of the third 2,042,6747, and 2.054,7491, respectively. During August the value for ore was 120,6457, against 70,5807. In August, 1876; of regulus, 140,5977, against 148,2967, respectively; and of unwrought, or part wrought, 276,0517, and 224,5207, respectively. The ore is received from a great variety of places; Chili and Australia are about equal, and yield together one-third of the whole. Chili sends regulus to half the whole amount. There is little wrought or part wrought copper derived from any country but Chili and Australia, the former holding to the latter the proportion of two to one.

country but Chili and Australia, the former holding to the latter the proportion of two to one.

The re-shipments of foreign copper are considerable. No ores or regulus, or precipitate are included, for reasons which must be obvious to every reader of the Mining Journal, but wrought and unwrought was exported to the value of 724,0254, during this year; last year in the corresponding period it was 909,0094. For the month it was 80,9314, and for August, 1876, 135 1784. British copper was exported in various forms. Wrought or manufactured was of the declared value of 669,4454, for this year up to August 31, which, compared with last year, shows a trivial increase. Ingots, cakes, and slabs were valued at 539,7864, and last year up to the same date 653,2534. During the month this form of cupreous production was rated at 66,0554, and for the month ending August 31, 1876, it was 72,5744. Wrought copper for the month 79,1444, compared with 82,1844.

Yellow metal sheathing was in less demand last month than wa expected to be the case, nevertheless it figures for 111,751*l*, and at the corresponding date but year it was 65,319*l*; for the longer period, 839,600*l*, and 600,216*l*. The total value of the shipments of period, \$39,000.4 and \$600,210. The total value of the shipments of British copper and yellow metal sheating was 2,048,831*l* for two-thirds of the year, and 1,917,177*l* for the same period last year. The figures for the shorter periods were 256,950*l*, and 220,077*l*. Brass, not comprising ordnance, stood at the longer period for 292,919*l*,, and the shorter 47,811*l*.; last year for the similar periods 327,492*l* and 43,617*l*. Arms and amountion, which involved both

292,919L, and the shorter 47,811L; last year for the similar periods 327,468L and 43,617L. Arms and ammunition, which involved both copper and lead, were value I at over 800,000L in the greater period, and 120,000L in the lesser. Last year in those spaces of time they figure I at a little more, probably owing to war preparations. We have not observed any marked change in the course of the copper trade. British India was by far our best customer, importing wrought or manufactured copper to about a third of the whole, he-ides taking considerable quantities of unwrought. France was the chief customer in that department; but, all forms of our cuprous exports considered, France was considerably behind India. It is to be feared that the existing, and still more extensively impending famine in that Empire will lessen our exports of metals thither. ing famine in that Empire will lessen our exports of metals thither Germany is a good customer for ingots and cakes. In proportion to its population Holland consumes, or at all events receives, vastly more than any other country. The United States is our worst customer. This country is a large importer of pyrites, which, taking copper, sulphur, and iron together, were valued since the year commenced at 1,212,8004, and during last month at 145,7504. In 1876 they were appealsed at 930,0484 and 103,3434. These we require

or our manufactures, and no portion is re-shipped.

The imports of zinc, crude, in cakes, and manufactured taken ogether, were since Dec. 31 last valued at about 663 000%, and during the month near 100,000%. Last year the computations were 610 000% and 75 000! The exports of British zine or spelter stood in value at 85,483!, since Jan I, and for August 12,489!. The exports of British spelter will be seen to be insignificant, and under that name ome foreign spelter there is reason to believe was comprise! A considerable quantity of block jack is found at home, and our lead nines yield much blende, but it is nearly all consumed here, and we need heavy supplies from abroad. The iron makers still complain that zinc is kept up at an unreasonable price by speculators for a rise, impeding the manufacture of galvanised iron.

Quicksilver was imported from Spain and California to the value 295,077L in the eight months, and 6215L in Augustlast. In 1876 the sums estimated were 329,289L and 5100L Of this we re-hipped this year to the value of 160,134L and during the month 19,355L. The value of 1881 was were not materially different. year to the value of 100,1345, and during the month 12,355. The values last year were not materially different. The producers of quicksilver in California complain of a failing demand in Europe, and stocks are in consequence becoming heavy in San Francisco; this seems unfavourable to firms holding here. It is evident from the above statistics carefully compiled from the returns of the Custom House to the Board of Trade, and from the latter to the House of Commons, that although depressed general trade, and the caution of contistists investors are replants, and consumers have caution of capitalists, investure, merchants, and consumers have greatly cramped our mining industry and our commerce in the superior metals that these interests have suffered less than most others, and if singuine expectations cannot be encouraged reasonable hope, patience, and enterprise are still justified.

SOUTH WALES COAL.

A good deal of discussion has lately taken place in several of the Welsh ports, more especially Swansea, in reference to the shipment of Welsh coal, and the latter port has earned an unenviable notoriety for itself on account of the alleged mixture of inferior qualities with the justly celebrated Aberdare and Merthyr earns. This mixture is called "salad," and we are informed it has proved/seriously detrimental to the interests of South Wales colliery proprietors in many of the principal French continental and foreign pusly defrimental to the interests of South Wales colliery porietors in many of the principal French continental and fore markets. Such being the case, it is satisfactory to know that subject has been taken up in right earnest, with a view to the dis-continuance of a practice which is not only seriou-ly affecting the interests of the tride but is positively unju-t. The whole subject was fully discussed at an influential meeting of the Swans-a Chamber was unly discusseration influential meeting of the Swans-a Chambrot Commerce last week. Mr Jas, Livingstone (Livingstone (Livingstone Livingstone and Shaumont, colliery proprietors and shippers), brought it forward in connection with a proposition as to the general trade of the port. He first traced the history of the port since the opening of the north and south docks, and showel that although the tennage rates had gradually increased the, coal trade had not been developed as rapidly as it ought to here deep now in proportion to the intrease in pidly as it ought to have done, nor in proportion to the increase in Cardiff and other Bri-tol Channel ports. The principal reason assigned by some for this comparative stagnation was the mixture of cals, and upon that subject many unwise and untruthful remarks had been said. He would in the out-et say that the mixture of coal was not fraudu'ent unless the mixed coal was represented to be something which it was not; and in mixing coal the shipper

but they were less expert than the Phœnicians in extracting the silver. Lead mining is again reviving, and no form of mining operation is, probably, more certain of eventual prosperity.

Our imports of the metal for the first month of this harvest were of the value of 116,687L, in the same month last year 140,033. During the eight months which have transpired this year 1,363,631L, and in the corresponding months of 1876, 1,136,406L. The export of British Lead last month was of the declared válue of 103,206L. In the month corresponding last year it was 89.771L. For the eighth month of 1877,615,831L, and for those of 1866,547.495L. There are no new phases in either import or export trade. The Chinese, through the media of British merchants chiefly at Hong-Kong, are the largest receivers of British lead, and their custom, although so much larger than any other nation, goes on increasing, and is likely to do so as long as their teat trade flourishes, in connection with which it is chiefly employed, especially by the foreign merchants who export to Europe and America. The increase last year is prodigious, from 141,476L to 231,296L.

The copper trade continues to represent the largest money value in connection with commerce in any of the superior metals. The imports are classified under the heads of ore—regulus, including precipitate, and unwrought, or part wrought. Of the sire the value this year so far has been 759,984L; last year in the same space of time 613,068L. Of the second in the same period 885,123L, and of unwrought, or part wrought, 2054,74L, and 2054,

THE GREAT ENGLISH RAILWAYS.

In referring recently to the London and North-Western Rai we assigned it a foremost place among the railway systems.

British Empire; and we even placed it in the very first rail-British Empire; and we even placed it in the very first mak, at the same time we must not forget the Great Western Rai with its chequered history, its vast ramifications, its bage of and its important traffic. The Great Western was at one something of a plaything or counter in the hands of the lat BRUNEL, who seemed to use it almost as much for the dement of his mechanical schemes as for the tenefit of the holders whose capital had constructed it. But with the deament of the same of the broad gauge, as opposed to the narrow gamay be said to have succumbed. The Great Western emerged the profit ess isolation to which it had be nreduced; and, up whole, its fortunes have decidedly improved, in consequence, that the past half-year was not a very satisfactory periods. that the past half-year was not a very satisfactory period say the dev-lopment of the traffic.

that the past hairyear was not a very satisfactory penotaste the dev-lopment of the traffic.

The Great Western now extends to Birkenhead in one direct and to Exeter in the other, while, with the help of the Company, its ramifications reach almost to the Land's Endhas also secured a footing in Ireland, and with the help of so it has established continuous and systematic traffic relations the Emerald Isle. It will, perhaps, excite some atonishment we state that the Great Western system now virtually represented and the Emerald Isle. It will, perhaps, excite some atonishment we state that the Great Western system now virtually represented by company, 1155 miles; lines powned by company, 38 miles; lines leased, rented, or worked 9684 miles: and foreign lines worked over 1204 miles. It is however, to note that 304 miles of the system have only a pagistence at present, or, at any rate, are not in a state admituse. stence at present, or, at any rate, are not in a state

the circulation of trains. Even with this reservation, however, it will be seen that the estern Railway now represents very nearly 2250 miles of western Railway now represents very nearly 2200 miles. The revenue acquired on this very extensive network in months ending July 31, 1877, was no less than 3,482,937, working expenses of the half-year having been 1,839,018, and the state of the course, to these imposing figures, but our business is rather technical aspects of the Great Western; and we proceed notice the fact that the Great Western; and we proceed past half-year 460,2534, in the maintenance of way and we number of miles equiptlying having heavy 20081. This sill, number of miles maintained having been 2008). This miles made up as follows:—Broad gauge, 2834 miles; arrow 1472 miles; and mixed gauge, 2524 miles. Of the brad miles ge it should be added that 394 miles were double line; mileage it should be acted what 35 miles were double me, nerrow gauge, 750½ miles; and of the mixed gauge, 205½ miles outlay made upon the maintenance and renewal of permanel properly so called was 353,262½, this total being made up the Wages, 127,372½; materials, 201,038½, sted rails, 20,00½, engine-power, 4852½. With regard to the item of 20,000½ for rails, it should be explained that it represents the difference the cast of steal and iron. The directors are debiting results the cost of steel and iron. The directors are debiting results 20,000°, in each half-year under this head, a suspense acount heen opened; at the close of July, 1877, a balance of 48,71% at the debit of this account, and it appears probable that sm will elapse before the item finally disappears from the combalance-sheets. The aggregate distance run by train dompast six months was 12.700,264 miles—by pas-enger trains,6 miles; and by goods and mineral trains, 6,671,014 miles. The outlay for locomotive power in the same period was 423,374 and coke figuring in this sum for \$4,3504.

THE MINES OF YORKSHIRE-ESTIMATED RESTAL RATEABLE VALUE.

From a Parliamentary Return just issued, showing the gromated rental and rateable value of the several coal, irostor other mines in England and Wales, together with the modes of assessment, we find some very interesting information, espace to the great difference in the assessment in different distribution. The number of coal mines in England and Wastated to be 2688, with an aggregate gross rental (estimated by the series are obtained by various means, and whilst we may assume they are tole-rably correct, a reference to the rental and we

and soul and market	d		Gross		Gitte
a of coal are worke	mine	entin	nated rent	al. rat	eable t
	52	*************	£104,476	SECTION ASSESSED.	1,3
Barnsley	10		1,665		1,0
	3	***********	145	*******	16.6
North Bierley	AR A	*****	16,834	*********	33,7
Dewsbury	81	*********	36,365	***********	11.0
Doncaster	2	****** * *****	14,780	*** * *********	5,1
Halifax	24	***********	0.8 9	********	3,1
Hemsworth	5	********	3,748	ARREST STORY	
Holbeck	13	***********	2,240	***********	4.8
Huddersfield		***********	5,768	***********	13,6
Hunslet			16,437	************	6,1
Leeds	6	***********	5,374	***********	
Pateley Bridge		********	43	SPRINGERS OF	3,5
Penistone	w (m)	***********	4,205	********* ***	31,6
Pontefract	13	*******	39,520	Kettern sense	56,7
Rotherham	24		75,677	**********	
Sedtergh	1	*********	10	***************************************	3
Settle	1	*** *******	500	***********	13,5
Bheffield	5	******	17,437	********	
Skipton	1		21	*** *******	
Tadcaster	11		15,573		65,1
Wakefield	41		77,976		
Wharfdale	1				28,3
Wortley	28		33,956		2007 8
	-		£479,691		£3814

fiv. the coal was worked for a short time and abandoned, in, the coal was worked for a short time and abandoned, in, the coal was worked for a short time and abandoned, and 4001 apwards.

In the doll a purposes to the returns, however, is the mode by sessements are made in the different districts. In the sessements are made in the different districts. In the coal is rated at the gross rent per acre paid by the coal is rated at the gross rent of value is deducted allow and for piant there is a rejuction of 20 per cent. gos, and for piant there is a certain-d by obtaining the sated rental of the coal is a certain-d by obtaining the stepidal, renewal of plant and other expenses, and some stabled, deducting therefrom working expenses, interest stabled expenses, including allowances for casualties, and identically a complicated way of rating. This is certainly a complicated way of rating. This is certainly a complicated way of rating. The winds of time. It is very different to the system as the value of the coal the gross is obtained, and about for the value of the coal the gross is obtained, and about for the value of the coal the gross is obtained, and about is deducted in fixing the rateable. This certainly appears and intelligible mode of making the rate. In Pontefract and intelligible mode of making the rate. In Pontefract is ideducted off the gross estimated rental, which is dealt is taken from the gross rental, the same at Hemsworth, Bramley the property is valued at so much per square for the rateable value there is a deduction of one-sixth for the rateable value there is a deduction of one-sixth for the rateable value there is a deduction of one-sixth for the rateable value there is a deduction of one-sixth for the rateable value there is a deduction of one-sixth for the rateable value there is a deduction of one-sixth for the rateable value there is a deduction of one-sixth for the rateable of the annual rental or royalty, from Bramley the property
for the rateable value there is a deduction of one-sixth
for the rateable value there is a deduction of one-sixth
gas rental. In the North Bierley Union the gross rental
wat three-fourths of the annual rental or royalty, from
botain the rateable value there is a deduction from the
sper cent. in respect of the mines, and 15 per cent. on
gast stam used in connection with them. Another and
sat the rate of 10l. per man employed, and the rateable
sith from the gross estimated rental. In Leeds the gross
first according to the number of tons of coal raised ansith for the gross estimated rental. In Leeds the gross
first according to the number of tons of coal raised ansoutiful per cent.
Several other instances in the returns show
terming the rateable value of mines in different districts
and from 10 to 25 per cent. off the gross rental was made
ing avaluation. If the same procedure prevails in the
sing districts of England and W des it certainly shows that
specthing radically wrong in the rating of collieries, and mining districts of England and W des it certainly shows that in onething radically wrong in the rating of collieries, and instanciated in the first colliery-owners so frequently at containing the same and money in appealing against their assessifies of time and money in appealing against their assessifies which refer necessary is a general system on some and melligible basis that can be easily understood. We have applianent which refer alike to all collieries, and we do not the same with respect to rating, and risment which refer this to all conferences and we do not see should not be the same with respect to rating, and stad of following out some plan of their own, should be adopta system laid down for them. If such were the case id be less litigation, which is often very costly to the

MINE COPPER, SILVER, AND GOLD, IN ABNORMAL CONDI-In another column we publish an interesting communica-par esteemed correspondent, Mr. T. A. Readwin, F.G.S., the refers to some interesting recent changes from normal retes a some minerals containing copper, silver, and gold, mal conditions—wanting a better term—he had distinguished growths." He refers to 15 interesting specimens in the changes or growths of which, he said, have taken tion the changes or growths of which, he said, have taken is this possession at ordinary temperatures, under ordition. Some of the growths have occurred in sulphides diver in normal conditions; others after decomposition bides Others in normal cylcite and quartz. He started at in quartz and cylcite such growths might derive their gratteles from metal contained in the "matrix" in a formal from the "matrix" in a formal from the contained in the "matrix" in a contained in the said and the said if not alt gether unknown. This idea, in possible con-hiltent "electro-motive power" of some kind, he thinks alely be found amongst the causes of such new formations s. The specimens show, probably, recent native copper, arguiferous gold (or electrum) growths; also some sin-sulphide (argentite and acanthite) growth. He stated sessed electrum growths out of galena, blende, mispickel, tetabedrite, t-tradymite, and barytes. He observed that think such facts as he produces are at all of unusual ocof mink such facts as he produces are at 10 of unbush oc-dibut, for the most part, unnoticed, owing to the popu-lat mineral substances in their present conditions assumed map priods very long anterior to the birth of living mine-He, threfore, brings them forward in the hope that in more attention may be given to mineral changes in their brine.

20,000l. fe

er trains,

RENTAL

the mode mation.

AND IRON IN THE UNITED STATES.—There has been little inverment in the demand for steel rails at Philadelphia. Hip is principally for lots of a few hundred tons each been croumstances prices are necessarily weak, although 1812. For the most part, nominally unchanged. Current 1814 845 to \$46 per ton cash at the mills. There have of iron rails than usual at Philadelphia, but the have been principally small. The sales made re-ud d 1000 tons for Cuba. The Baldwin Loc motive ad-phicare now employing about 1200 hands. Orders the have been received within the past few days, ideduring fall and winter seems pretty well assured, ing trade of Pennsylvania keeps up well. Messrs. J. ling trade of Pennsylvania keeps up well. Messrs. J. n., of Chester, are now employing 1300 men, and they build not not let be under the remainder Business in plate and tank iron has been somewhat Polladelphia, some of the mills being full of orders, are doing very little. At Pittsburg the aspect of the diron trade is considered to be a little more hopeful, a complaint is that prices are unremunerative. The reduction of anthracite and bituminous coal in Pennau, II this year was 13,965,132 tons against 12,057,643 orresponding period of 1876, showing an increase of as this year.

RO PASCO SILVER MINES.—The Panama Star and Herald tes that—These wonderful mines are destined to word with their production as soon as the machinery and is placed in position. According to the reports teginers, the quantity of metallurgical earth which teld from these mines by Mr. Mieggs, the contractor, is submarked. givers, the quantity of metallurgical earth which discount these mines by Mr. Miegzs, the contractor, sabm-rged shafts are drained would amount to over Now this at 6 marks of silver to the ton, according equal to in round numbers 1,000,000 marks, or but the walve of the best ore at measant not comethe value of the best ore at present not come is impossible to state, but it is believed to be worth as that of the metallurgical earth now available, ereached during the present year, proving a source wealth to Peru.

LAMANCH SILVER-LEAD MINING COMPANY, CARNARVON-Smedgree of interest has been created in the City through limble introduction of the above mine. The owner—Mr. is well known in connection with the coal production of seed his companies yielding 1000 tons per diem. His active limber, it is an important feature to notice that law the limber, it is an important feature to notice that law overflew sufficient for all purposes, irrespective of the has overflew sufficient for all purposes, irrespective of the ham overflew sufficient for all purposes, irrespective of the ham overflew sufficient for all purposes, irrespective of the ham overflew sufficient for all purposes, irrespective of the ham overflew sufficient for all purposes, irrespective of the ham overflew sufficient for all purposes, irrespective of the several loofs, the configuration sufficient for the several lodes, the configuration sufficient plants of the several lodes, the configuration sufficient for the several lodes. ANARCH SILVER-LEAD MINING COMPANY, CARNARVON-

years are required to open out and even partially exhaust the ores already discovered, and contained in the ground above the deep already dis

REPORT FROM THE NORTH OF ENGLAND.

REPORT FROM THE NORTH OF ENGLAND.

Sept. 6.— In almost every notable aspect the Iron Trade of the North of England has undergone no appreciable change during the past week. On the contrary, trade is as quiescent and dall as it possibly can be. Prices are extremely sluggish, and remain at their present low level for a much longer time than they usually do even in times of depression. There are those who still hope that a lower range of quotations will come to prevail, but it is not a rare thing to hear pig-iron makers declare that if any further fall occurs the majority of them will be compelled to "make tracks" for the Bankruptcy Court. On 'Change at Middlesborough this week business has been done in No. 3 at 40s., while No. 1 has been selling at 44s. 6d. net. From these rates no material deviation has been made. The issue of the returns of the Cleveland Ironmasters' Association for the month of August has not this week tended to increase confidence or convey assurance in any way. There has been a decrease indence or convey assurance in any way. There has been a decrease of 9177 tons in the make compared with July, while the stocks in makers' hands and in warrant stores have been increased by 4400 tons. It thus follows that 14000 tons less iron has gone into consumption during the month of August than during the previous month of July. Out of the 162 furnaces erected in the North of England only 106 are in operation, lengthyre fewer than in the consumption during the motion.

month of July. Out of the 162 furnaces erected in the Norm of month of July. Out of the 162 furnaces erected in the Norm of England only 106 are in operation, being three fewer than in the previous month of July. The finished iron trade presents no feature of change, and engineers and iron founders are doing only a middling business.

The arrangements for the ensuing meeting of the Iron and Steel

Institute at Newcastle are now in a very forward state. The following papers have been promised up to this time:—
Adjourned.—G. Dovg. Jun.: "On the North Lincolnshire Iron District."
HENRY SIMON.—"On Chaudron's Method of Shate Sinking through Water
Bearing Sixtata."

HENRY SIMON.—"On Chaudron's Method of Shaft Sinking through Water-earing Strata." L. Bell, M.P., F.R.S.: Part II. of paper "On the Separation Carbon, Silicon, Sulphur, and Phosphorus in the Refining and Puddling Fursey, and in the Bessemer Converter."
DR. PERCY, F.R.S.—"On some Scientific Facts connected with the Manufacture I Iron," &c.

"&c.
wson.-"On Mechanical Puddling."
PLUM. Old Park, Salop.-"On Improvements in Blast-Furnace Water

the Thy-res.

L. Breavenson.—"On the Manufacture of Coke in Relation to the Iron Trade is North of England."

C. Greenwell.—"On the Geological Features of the Great Northern Coal.

ield."

OHAS. Wood.—"On Four Years' Improvements in the Utilisation of Slag:
F. Giesbers.—"On the Removal of Phosphorus from the Materials use
melting Pig Iron under M. Stein's patent."

A. THOMAS.—"On the Late st Improvements in Belgian Merchant Rolls."

WILLIAM WALKER.—"On a New Machine for Prilling Ironstone."

M. GAUTIER, C. E.—"Results of Experiments with Cannon manufactured
teed without Blows."

The Stephysic R. P. S.—"On some Reconflicults the light of the Pigest Rolls."

Steel without Blows."

DR. Siemers, F.R.S.—"On some Recent Results obtained by the Direct Process of Manufacturing Iron and Steel."

The whole of the works in the town and neighbourhood of New-The whole of the works in the town and neighbourhood of new-castle are being thrown open to the members, and excursions are being organised to the Consett Ironworks, to the Roman Wall, to Elswick Works, and the Newburn Steelworks, to the River Tyne Works, and to the Middlesborough district. The following is the

works, and to the Middlesorough district. The following is the programme for the excursion to Cleveland:—

SEPT. 21, 8 A.M.—A special train, kindly provided by the North-Eastern Railway Company, will I ave the Central Station, Newcastle, cuiling en route at the New Browney Colliery of Messrs. Bell Brothers, near the City of Durham. Members will here have an opportunity of seeing the manufacture of coke on modern principles.

Plan. Arrive at the Clarence Works of Messrs. Bell Brothers, which will be pen for inspection.

open. 11 A.M. - Arrive at the Clarence Works of Messrs. Bell Brothers, which will be open for inspection.
12 NON. - Leave Clarence Ferry in a special steamboat for the Eston Steelworks and Blast Furnaces of Bolekow, Vaughan, and Co.
2 P.M. - Leave Eston Junction by special train for Middlesborough,
2:0 P.M. - Luncheon in the Royal Exchange, Middlesborough, kindly provided by the local trade

During the afternoon the following works in Middlesborough and its neighbourhood will be open for the inspection of members:—
1. - The Fees side Ironworks (Ropkins, Gilkes, and Co.), where the first Danks' Rotary Furnaces constructed in this country will be seen in full operation.
2. - The Ayreome Ironworks (Gilker, Mills, and Co.) Mr. Giers read a paper respecting these works at the Dudley meeting of the Institute in 1871.
3. - The Frees Ironworks (Gilker, Wilson, Pease, and Co.) Here Mr. Chas. Wood's patents for the Manufacture of Slaz, Cement, &c., will be seen in operation.
4. - The Engineworks (Hopkins, Gilkes, and Co.)
5. - The Memory Holling Mils (Fox, Head, and Co.)
7. - The Ayrton Rolling Mils (Fox, Head, and Co.)
9. - The Newport Ironworks (B. Samuelson and Co.)
10 - Middlesborough Wireworks (Hill and Co.)
Mr. J. S. Jeans, of Darlington, has now been formally elected by the Council to the office of general secretary of the Institute.

Council to the office of general secretary of the Institute.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Sept. 6 .- The Earl of Dudley and the other leading finished ironsept. 6.—1ne Earl of Dudley and the other leading innished fromakers of Sou's Bathfordshire have issued circulars announcing a frop of 10s. per ton in prices. This leaves the present quotation of marked bars at 8/.10s. with the usual 12s. 6d. extra for his lordship's brands. Round oak sheets (best singles) are now 10l. 10s., and the "Severn" brand of Messrs. E. P. and W. Baldwin is 12l. 10s. The drop is npon "lists" issued at the close of April last year. More orders are being received at the mills and forges as the result of the new rates, but there are consumers and merchants who essert that no great rebeing received at the mills and forges as the result of the new rates, but there are consumers and merchants who assert that no great revival in trade will take place until marked bars are to be had at still 10s, lower. The Earl of Dudley, in his capacity as colliery proprietor, and the other principal collery owners, have also issued new lists of coal prices. His lordship's furnace coal, east of Dudley, is down 2s, per ton, as is likewise his best Thick coal, seconds, steam, and lumps. The demand for coal has been improved by the new quotations, and collery owners are doing better than they recently were. No substantial change has taken place in the condition of the pig-iron or ironstone trades, though prices of pigs are weaker. Since my last the shares of the Sandwell Park Colliery have sold

Since my last the shares of the Sandwell Park Colliery have sold at 8t. 5s. prem. The Cannock and Huntington shares are at 3 dis.; the Spon Lane Collery at 7 dis.; the Cannock Lodge Cad Company and the Horseley Company, each at 1 dis.; the Walsall Woot Collery Company at 12½ dis, and the shares of the Pelsall Coal and Iron Company at 12½ dis. Sellers of John Bagnall and Sons' property want 3t 10s. for their 10t. shares, but buyers only offer 3t. Buyers of the Chillington Iron Company's 10t. shares are offering 3t. 10s., but at this price no holders appear. The shares of the Birmingham small Arms Company have changed hands at 9½ prem, cum div., and those of the Patent Shaft and Axletree Company at ½ dis.

The directors of the Cannock and Huntingt in Collery Company (Limited) have issued a circular in which they say that, being anxious to avoid the necessity for miking further calls, they have resolved to give shareholders the option of paying up their shares, either

to give shareholders the option of paying up their shares, either wholly or in part, the company agreeing to pay interest half-year'y at the rate of 5 per cent. per annum on the amount so pre-paid. The shareholders of the Spon Lane Collery have met at West Brom wich and resolved to empower the directors to complete the purchase of the Littleton Hall Company, belonging to Mr. W. H. Dawes, for 1500L. It was explained that this step was necessary to free the Spon Lanc Colliery from water, and to satisfy the requirements of the Government. The directors of the Muntz's Metal Company have resolved to declare an interim dividend at the rate of 10 per cent. er annum out of the ascertained profits of the six months ending

with June.

The Birmingham Small Arms and Metal Company (Limited) sixth yearly meeting of shareholders was held at the factory, Small Heath (Mr. J. D. Goodman in the chair). There were also present Messrs. Swinburn, Buckley. Bayliss, Abraham, Smith Thernton, Playfair, Wilson, Pryse Ratcliff, Rayner, Elwell, H. Woodward, Carter, Cooper, J. Watson, R. Watson, Whitmore, Billing, B. Woodward, Bentley, Edmunds. Hasluck, F. Woodward, and Ash. The halance-sheet to June 30 was adopted, and a dividend at the rate of 10 per cent. per annum for the past six months was declared. Messrs. Goodman, Swinburn, and Baylis (the retiring direct rs) were re-elected; Messrs. Carter and Carter were re-elected auditors. The thanks of the meeting were given to the directors, Major-

General Dixon, Mr. T. R. Baylias, and the other officers, for their services during the past year, and to Mr. J. D. Goodman for presiding. A fatal explosion of gas occurred on Friday afternoon in No. 2 Pit, at Hedne-ford, of the East Cannock Colliery Company (Limited). The explosion took place in one of the main gate roads, killing a lad

on the spot, and injuring five other workpeople, three of whom have since died. An inquest has been opened and adjourned. Hitherto the pit had been accredited free from gas, there having been no previous explosion in it.

In North Staffordshire prices of finished iron are generally considered to have reached their minimum, consequently the reduction in the southern part of the county will not greatly affect the market. Orders on hand are few, but as much work is being done as has lately been the case. Stocks of pigs are increasing.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

Sept. 6.—Unfortunately no movement of importance has taken place in the Iron Trade during the week. There is, perhaps, a better eaquiry for miscellaneous descriptions of iron, but for iron rails a very poor demand exists, and prices are unremunerative. There is no sign of a re-start at any of those works which have been so long no sign of a re-start at any of those works which have been so long closed, and the rumour recently afloat respecting Cyfarthfa seems to have been totally devoid of any foundation. For bars there is but a limited enquiry, and the make of pig-iron continues large, without any improvement in the quotations. Clearances during the week have been mainly to the Cape, the Baltic ports, and Brazil. The steelworks are, as usual, well employed, and a fair proportion of the recent or lers given out for India has been secured by this district. The price (about 71 per ton) at which they have been taken, however, is such as to leave but a small margin for profit. It is evident, that the steel industry is becoming a very important branch of the staple trades. At present there are very few works in the district which can produce this commodity. The demand for Tin-Plates is sluggish, and the restriction in make appears as yet to have had very little effect either upon the demand or prices. Quietude is the prevailing characteristic of the Coal Trada. Coarances toreign again show a falling off. Orders, too, are complained ances to reign again show a falling off. Orders, too, are complained of as being scarce, and ships still leave in ball at rather than accept the low freights which are offered. The demand for steam coal is moderately good; but for house qualities the colder weather has given an impetus to the demand. Patent fuel is a du'l sale. The

given an impetus to the demand. Patent fuel is a du'l sale. The collieries are fairly well employed as times go, and disputes between masters and men are rare.

At the Upper Cwmpennar Colliery, Mountain Ash, the employers (the Powell Duffryn Company) have agreed to abolish the doubleshift system, a decision which the workmen have received with feelings of satisfaction. The new Union of Moners has been established, but as yet very few adherents have been made, many old colliers, remembering past experiences, fighting shy of Unionist principles. At a delegate meeting held at Merthyr, a code of rules for the regulation of the association was agreed upon. A deputation was appointed to wait upon the manager of the London and South Wa'es Colliery Company, at Risca, with reference to some wages dispute.

Colliery Company, at Risca, with reference to some wages dispute,
The West Swansea Colliery Company (Limited) is shortly to be
brought before the law courts on a winding-up petition, which will
probably be heard some time in November.
Negociations are going on between the Taff Vale Railway Company and the Penarth Dock and Harbour Railway Company for the
provision of additional dock accommodation at Penarth, which the
increased shipping visiting the port rendered necessary. increased shipping visiting the port rendered necessary. The Penarth is leased by the Taff Vale. The result of the negociations is not yet known. The new works in connection with the Swansea tramways are being rapidly pushed forward. Nothing definite has transpired with regard to the future of Abernant and Plymouth, but it is stated that the proprietary are indisposed to spend more money on the concern.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Sept. 6.—There is a steady business at the ironworks in Derbyshire, fully equal indeed to that done in most other counties where iron is one of the staple industries. The production of pig goes on as usual, whilst the foundries continue to be fairly employed. At Dronfield the Bessemer Works have been doing very well, but the competition in the market for rails made of that material has been such that Mora. Wilson ord Committee the production of the confidence of the confidenc the competition in the market for rails made of that material has been such that Mes-rs. Wilson and Cammell have been obliged to give their workpeople notice of a reduction of wages to the extent of 10 per cent. The notices expire on Saturday, but it is not expected that work will be stopped, seeing that wages have recently been lowered at other Bessemer establishments. At some of the collieries there is a little more activity, and the quantity of coal sent to the Metropolis has slightly increased; but prices remain without alteration, a fact that the miners appear to altogether ignore. They appear to think that the slightest improvement in the business doing necessarily mems a great increase in profits and should be followed by an advance of wages. But many collieries have of late been worked without making any profit whatever. At the lead mines matters appear to be going along smoothly, but the out-put of ore is very far below what might be expe ted, considering that Deb byshire is about the oldest lead county in the kingdom; but somehow it appears to have got into disreputs with capitalists but somehow it appears to have got into disrepute with capitalists and ordinary speculators. The Stephenson Memorial Hall will shortly be commenced in Chesterfield, and will be about the finest shortly be commenced in Chesterfield, and will be about the finest public building in the town, and in every way worthy of the man whose memory it is intended to honour. George Stephenson, it may be said, was instrumental in opening out the coal fields of a great part of Derbyshire, for, by the Midland Railway, he gave access to many large and important markets, and led the van by sinking the Tapton Colliery. He resided at Tapton House, and died there. The residence has recently been purchased by Mr. Charles Markham, the able and respected managing director of the Staveley Coal and Iron Company. The foundation stone of the hall is to be laid by the Marquis of Hartington, with full Masonic honours. on Sept. 15. The contract for the erection of the building is 8582. The colliers have held several meetings of late for the purpose of getting those who do not belong to the association to join, and for getting those who do not belong to the association to join, and for showing a bold front against any attempts at a reduction of wages. Staveley, however, appears to be sared ground on which the scri-ligious feet of the Unionists, and their leaders dare not tread for the men secreted in a body some time since at the request of Mr. Mark-ham, who also withdraw from the Masters' Association, so that there is something like in dependence on the part of the workmen as well as of the chief of the vast works. There is also the advantage of an excellent sick and accident fund that cannot be diverted from the objects for which it was started, unlike that of the Miners' Association, which was swallowed up by the unfortunate Sherland

Colliery.
In some branches of the Sheffield Trade an improvement has to be noticed that is likely to continue for some time. The Government noticed that is likely to continue for some time. The Government in succouring the unfortunate starving people in the Madras Presidency find that to reach them rails must be put down, and it is understood that some thousands of tens have already been ordered, some considerable portion of which has been all atted to Sheffield manufacturers. Makers of Bessemer are, therefore, likely to have a better time of it than for some time past, although one or two of them have been well supplied with orders. Australia and other of our colonies are now doing a very fair trade with us in some description of goods, but there has not been much change with respect to the business doing with America. It was considered that the war in the East would lead to a heavy demand for surgical tools, as well as for general war material, but this has not been the case to well as for general war material, but this has not been the case so far, nor is it likely to be the case. The Armour-plate Mills are the reverse of active, but there is a steady our-put of plates suitable for reverse of active, but there is a steady out-put of plates suitable for shipbuilding purposes. Some of the houses engaged in crucible steal castings are doing tolerably well, but there has been no material change with respect to table and other cotlery. Files, saws, and similar goods are very quiet. Outside the town the works appear to be in a similar point into no what they have been for some weeks. At the Ickles they have been for a considerable time past busily engaged in the rolling of Bessemer rails, and it is said that

there are orders in hand that will take several months to clear out. Coal Trade of South Yorkshire is slightly better than it has been, The Coal Trade of South Yorkshire is slightly better than it has been, no doubt due to the change in the weather and the commencement of stocking for the winter by large consumers. A little more is being done with London in the best qualities of households, but there is not that demand to lead to any increase in price, for there is still a good deal of competition between the see-borne and inland coal. Steam qualities go off very well, and there has been a marked increase in the quantity exported from Grimsby, as compared with the month of previous years. But this is not likely to continue many weeks longer, seeing that our colliery owners, looking forward to the closing of the Baltic, are sending as much away as they can. Gas nuts are moving off rather more rapidly, but there is not any

Gas nuts are moving off rather more rapidly, but there is not any notable alteration with respect to engine fuel.

The Wharncliffe Carlton Colliery and the Dodworth Road, both close to Barnsley, are still standing, the former having lost the capital company, and the latter having been obliged to go into

After being out for several weeks, the colliers belonging to the After being out for several weeks, the colliers belonging to the Dod worth Silkstone Colliery, near Barnsley, have agreed to have the matter in dispute put to arbitration. During the four months the men were on strike there were no actual deeds of violence committed, but there were threatening letters, in one of which the writers said, if the manager did not mind, "We shall watch you, and send a ball against your head when you are not aware."

At a meeting of miners' delegates, held at Barnsley, it was agreed not to entertain the proposal of the masters for a 5 per cent. reduction. Some of those present thought as trade was improving their employers should give them the 6 per cent. they last year took off their wages. What decision the masters will come to will no doubt be made known in the course of a few days.

doubt be made known in the course of a few days.

TRADE OF THE TYNE AND WEAR.

Sept. 5.—The Coal Trade has been very quiet during the past week, but shipments of good steam, gas, and house coals have been fair. Now that the masters in Northumberland have failed in getting a reduction in miners' wages they are turning their attention more to the question of round and small coals, and it is very probable that a portion at least of these coals will be left underground, but the men ought for the benefit of all parties to produce as much

The Scumerston Coal Company have succeeded in finding a new coal seam near Berwick; the shaft has been two years in sinking, and the depth is 140 yards from surface. The coal is of excellent quality, and it is intended to ship it in the new dock at Berwick. This ancient border town has been a sort of sleepy hollow for a long period, but the formation of these docks, and the opening out of the period, but the formation of these docks, and the opening out of the coal seams which abound in the vicinity, will materially improve the trade of the town and district. A serious accident occurred at the Seaton Barn Colliery on Tuesday, and two men were suffocated. One of the ropes broke, and the cage fell down the shaft. Several men were employed in repairing the damage, and they were in a drift near the up-cast shaft; it is supposed that they were suffocated by the fumes from the underground furnace. At Bearpark a large new coking colliery, lately described in the Journal, opened by W. G. B. Forster and others, two miles south of Durham, a dispute took place a few weeks ago respecting a local reduction made in the prices of the hewers, and as the men strongly objected to this reducprices of the hewers, and as the men strongly objected to this reduction it was agreed to refer the matter to arbitration, and as the men appointed could not agree Mr. Hepple, of Brandon, was nominated umpire, and he made his award, but in spite of this the men stood out and refused to accept the reduction, and last week after due notice the men were ejected from their houses, which belong to the owners. It is stated that a large number of men are ready to take the places of the men on strike. A number of the Ryhope men were brought before the Sunderland magistrates on Saturday charged with absenting themselves from work without having given due notice. places of the men on strike. The counsel for the men admitted that the strike was unjustifiable. and asked for an adjournment of the case for a week, intimating at the same time that if that was conceded his opinion was that an amicable arrangement between the parties would be made in the meantime. After some discussion this course was ultimately

NEW INSTRUMENT FOR UNDERGROUND LEVELLING .- At a meet wood Memorial Hall, Newcastle, on Saturday, a paper, by Messrs.

T. Lindsay Galloway, M.A., and C. Z. Bunning, was read "On a New Instrument for Levelling Underground." The general principle of Instrument for Levelling Underground." The general principle of the instrument was brought under the notice of the writers by the system adopted by Dr. Luigi Aita in taking the levels for sanitary works in Padua. They have found reason, however, while retaining the general rinciple of Dr. Aita's instrument, to make several improvements in its construction, and an important change in the mode of applying it. The apparatus consists essentially of two glass tubes connected together by an india-rubber pipe, which may be of any connected together by an india-rubber pipe, which may be of any converient length—say, of 10 yards upwards. Each glass tube is attached to a suitable scale, upon which are marked subdivisions, in the same manner as upon the ordinary levelling staff. The tubes are alled up to about the centre of each scale, with water coloured so as to render it more distinctly visible. If now the scales be held vertically upon any sloping or uneven surface, and at any distance apart that the length of the india-rubber pipe will admit of, the difference of the readings denoting the position of the coloured liquid in each tube will represent the difference of height between the stations at which the scales are held. In the instrument exhibited the length of the glass tubes was 3 ft., and of the india-rubber connection 12 yards. This instrument had been specially constructed to tion 12 yards. This instrument had been specially constructed to meet the requirements of low workings in mines, but longer scales and tubes might be employed with advantage, either in surface levelling or in mines where the workings are high. In thus adopt-ing long glass tubes, and attaching them permanently to the scales, the writers found it advisable to depart considerably from the form of apparatus used by Dr. Aita. The glass tubes in the Aita level are only a few inches in length, and are moveable upon the scales being attached by means of a sliding frame, which can be raised or lowered at pleasure. Instead, however, of the liquid, as in the present apparatus, simply finding its own level in the tubes, the tubes them-selves are shifted in the Aita instrument so as to suit the level of the liquid. The apparatus in its present form, besides being more simple, is necessarily quicker in its action in adjustment of any sort being required before reading. In order to expedite its use still further a short piece of tube of small diameter has been placed near one end of the india-rubber hose, which resists the oscillations one end of the india-rubber nose, which resists the oscillations of the liquid, and at each observation brings it rapidly to rest. By this means a levelling can be made almost as quickly as the apparatus can be moved from station to station, and many sights may be readily taken during the time which would be spent in simply getting up the telescope level and adjusting the plate screws and focus. On the motion of Mr. Bewicke, Haydon Bridge, seconded by Mr. Ramsay, Sherborn Tower, a vote of thanks to Messrs. Galloway and Bunjung was carried by acclamation. and Bunning was carried by acclamation.

REPORT FROM CORNWALL

It is expected that Prof. Bell's extraordinary invention—the telephone—will be put to a practical use in our Cornish mines, in the way of communicating from the surface to the men working in the deep cuttings underground. At any rate, experiments in view of this benefit have been made, mainly through the exertions of Mr. Arthur Le Neve Foster, brother of Dr. C. Le Neve Foster, Government Inspector of Mices for the West of England. Already in large coal mines either the electric telegraph or speaking tubes have been laid, but the former is attended with some difficulty in learning, and the latter is of no use at a great distance, the friction making the sounds indistinct, while both would be condemned on the score of cost. The telephone however, presents no such disadvantages. All that has to be conveyed to any part of the mine is an insulated wire cased in India-rubber, through which the sound of the volve can be conveyed, for, whilat the speaking tube conveys vibrations of air direct, by means of the telephone vibrations of air are altered into vibrations of electricity, which again become vibrations of air are altered into vibrations of electricity, which again become vibrations of air are much more distinct, and can be carried a far greater distance than by the speaking tube. The experiments to which we now refer have taken place in the presence of a large number of gentlement at West Eliza Mine. The wire was taken

down the main shaft of the mine, and was carried down into the workings by Mr. Foster in the roughest possible way. It was fastened in the 42 fm. level to the air pipes, and the whole time occupied in making the arrangements and commencing conversation was 15 minutes. The results were more than could be expected. Every word from below was plain and elear—songs, and even whispers, were distinctly heard, and, on being questioned by Dr. Foster from above, those below replied that they could hear the whisite of an engine on the line. The wire was cut in the mine, and two persons joined hands in keeping up the connection between the main piece and the end. These gentlemen constituted the conducting incidium for the electricity, and the conversations were as plain after the severance as before. The experiments were most successful throughout, and it was the general opinion that the telephone could be made an instrument of great benefit and facility in the working of our mines.

I regret to notice that at West Poldice account, when Mr. R. R. Broad expressed the delight the meeting felt at seeing Sir F. M. Williams again among them after his recent serious accident, Sir Frederick, while expressing thanks for his recovery, said he felt he should never again be the man that he was before that accident. Many of us would be very sorry if that should be the case, as Sir Frederick is a kind-hearted gentleman, desirous of supporting the mining interest, and of doing good to those around him in various ways. No political considerations have a place under such circumstances. When the unfortunate accident occurred to Sir Frederick, no persons were more sorry than many of those who are not of his views in political matters.

McKean is boring machines are to be immediately set up in South Roskear Mine, Camborne, for the purpose of both sinking and driving, and great results are expected. Three rival boring machines will thus shortly be at work—The Barrow at Dolcoath and South Tovity, the Beamont at Carn Brea, and the McKean at Sou down the main shaft of the mine, and was carried down into the workings by Mr. Foster in the roughest possible way. It was fastened in the 42 fm. level to the

folcoath and South Cristy, the Assault State of the State of State

Eliza tin mine. It would be a great pleasure to see many more bals being proceeded with with equal promises of auccess.

The statement that Mr. Bailey has signified his intention of getting rid of his interest in Cook's Kitchen is entirely without foundation. Mr. Bailey being the largest shareholder in a cali-making mine, his withdrawing from the concern at this time would have a disastrous effect. It should be added that a balance-sheet has always been laid before the adventurers at the mines under the purcership of Messrs. Pike and Son.

The dressing cost at Wheal Eliza is reduced to 22s. or 23s. a ton per month. Mr. R. H. Williams, C.E., is about to patent a buddle, by the use of which a shovel will not be required for the tinstuff from the time it leaves the bottom until it is in the calciner.

TINCROFT AND CARM BERA MINES.—"A Shareholder" writes:—I am very pleased to learn that at Tincroft, on Friday, Capt. Teague still retains as large an interest in the mine as he has held for many years—considerably over 2000 shares. There are three other large shareholders, who hold respectively 300, 320, and 200 shares, so that these four shareholders actually hold one-half of the mine, which is divided into 6000 shares. Five shareholders held from 10 to 200 shares each, and it shareholders a shareholders about 200 shares are altogether 410 shareholders here.

Fincroft has a balance against the mine of 15,593!.—The Chairman said that

adventurers hold 62, 51, and 45 respectively. Seven shareholders own from 20 to 30 shares each, and six 10 shares each and above. There are altogether 17s shareholders here.

Tincroit has a balance against the mine of 15,593l.—The Chairman said that from April, 1663, when they brought the books of the Tincroit Mining Company into Cornwall, they had paid in dividends 232,560l., which, added 10 the 28,500l. which was paid in dividends when the mine was held in scrip, made over 261,000l. which was paid in dividends when the mine was held in scrip, made over 261,000l. This was the only break since that time, and he was obliged to ask them to keep a dividend in abeyance.—A committee was appointed to writ on Lord Robartes, with the view of obtaining assistance towards defraying the cost of supplying a boring-machine to the mine, which the chairman estimated to cost 30 0l.

Care Brea has a debt balince of 26,024l. The balance at the last account amounted to 2171, raising the total liabilities to 28,201l.—The Chairman explained that against this amount they had 300 tons of tin lying in the stopes and passing through their hands, which, at the prices of the day, would fetch 11,25 l., while, copper ore that would be sampled for next Thursday, was worth 304l. The machinery and plant he valued at 30,000l., so that their assets might be considered at something like 31,550l.; therefore, were the mine wound up at once, they would have 3349 surplus. Although the balance was large, the chairman said he did not feel called upon to issue a notice empowering him to make a call.

Wheal Peevor has a loss of 51l.—The Chairman thought it a very satisfactory statement of accounts, and Mr. Chellew observed that there had been an actual profit of 350l.—Nr. Rule asked what the total liabilities of the mine were?—The Chairman said that the powerful machinery and dressing appliances had been erected during the past year at a cost of 2660l., of which labov. had been paid, leaving 1480l. now due. Against that they should raise all the tin the

In compound steam-engines, as they are usually constructed, the pistons of the high and the low pressure cylinders are either rigidly connected together or are connected to one crank shaft, so that the one is compelled to move at a speed corresponding to that of the other, and thus the acting pressures are determined independently of the work performed by each piston. One part of the invention recently patented by Mr. HENRY DAVEY, of Leeds, relates to an arrangement of compound pumping-engines, such that each piston can rangement of compound pumping-engines, such that each piston can move independently of the other at a speed determined by the rela-tion between the pressure acting on it and the work performed by it, and by this arrangement he obtains the additional advantage of of duplication, having two separate engines, either of which can be worked alone while the other is under repair. For this purpose he constructs two complete pumping-engines, each working its own pump or pumps, their steam cylinders being either both of the same size, or the one being larger than the other, as circumstances require, and by preference he places the cylinders near one another, side by side. He provides two steam reservoirs, preferably the first in the form of an annular cylinder surrounding and enclosing the second form of an annular cylinder surrounding and enclosing the first in the form of an annular cylinder surrounding and enclosing the second, which is cylindrical; and from the outer to the inner reservoir he provides a passage fitted with a valve loaded so as to open only when the pressure within the second reservoir is less than that within the first by an amount equivalent to the load on the valve. The first or outer reservoir is supplied with high-pressure steam from a boiler, and supplies the smaller or high-pressure cylinder, the exhaust from which is led into the second or inner reservoir. From the latter the larger or low pressure cylinder, a supplied and the the latter the larger or low pressure cylinder is supplied, and the exhaust from this cylinder is led into a condenser or into the atmoexhaust from this cylinder is led into a condenser or into the atmos-phere. There is a passage by which the exhaust from the high-pres-sure cylinder can be led into the condenser, and the various pipes and passages are provided with shut off valves, some of which may be of compound form, closing one of the communications when they open another. Each cylinder may have in line with it an air pump open another. Each cylinder may have in the with it an air pump worked direct from its piston, or there may be a separate air pump worked by an auxiliary engine, or a pair of air pumps so worked when the duplication of parts is required to be complete. When the engines are in their ordinary working condition, both cylinders being in use, steam at or near boiler pressure flows from

cylinders being in use steam at or near boiler pressure flows from the first reservoir to supply the high-pressure cylinder in which it works, either at full pressure the stroke or expansively to the extent determined by the adjustment of the valve gear, the exhaust from this cylinder flows into the secon! reservoir and thence to supply the low-pressure cylinder, the exhaust from which flows to the condenser or into the atmosphere. Should the load or pressure on either piston vary, its speed will vary independently of the other piston, which will nevertheless be influenced by it so as to bring the two motions nearly to accord. Thus, if the high-pressure piston should gain or lose speed, it will supply more or less exhaust steam to work the low-pressure piston, and if the latter should gain or lose speed it will accelerate or retard the high pressure piston by diminishing or augumenting the back pressure thereon.

By closing the supply and discharge valves of the low-pressure cylinder, and leading the high-pressure exhaust into the condenser

cylinder, and leading the high-pressure exhaust into the condenser or into the atmosphere, the high-pressure cylinder can be worked alone; and, again, by closing the supply and exhaust valves of the high-pressure cylinder the low-pressure engine can be worked alone, being supplied with steam which cannot have higher pressure than that in the second reservoir as determined by the load on the valve of its supply. When the boiler is near the engine the first re-

according as the one or the other engine is to work as the high according as the one of the other engine is to work sure engine, the communication between the said chyalve chest of this engine is closed (the communication) valve chest of this engine is creative tendential better and the high-pressure reservoir being opened, and the latter and the high-pressure reservoir being opened, and the munication with the exhaust is opened while the reverse concations are established with regard to the other engine, thus it to work with the exhaust steam of the first-named engine, the same communications in both engines the establishing the same communications in both engines they me both worked as high-pressure or as low-pressure engines. Let with the cylinders, or may work them through the interrent levers, bell cranks, or other connections suited to the relative tions of the cylinders and pumps.

TREATING FERRUGINOUS SANDS.

It is well known that there are certain iron ores and resides of iron which from their being in a state of minute discount of the country difficult to small or the country diff oxides of from which from their being in a state of minute of the state of minute of the state of minute of the state of the class referred to are the irong at the state of the class referred to are the irong are purple ore," the last named being a residuum of what is the "wet" process of treating iron and copper purities as "purple ore," the last named being a residuum of what is know the "wet" process of treating iron and copper pyrites. To ore these difficulties Mr. Robert Main, of the Carabre Iron Coatbridge, has patented an invention which consists or ore or oxides of the kind referred to with blackband or classification or the ironstone, and in calcining the mixture in the mangerally received with the ironstone alone or in the mangerally received.

or other ironstone, and in calcining the mixture in the manner narily practised with the ironstone alone, or in any other and manner, prior to putting it into the blast-furnace.

In carrying out the invention when adopting the ordinary heap or open hearth method of calcining the ironstone as proportion of the finely divided iron ore or oxide is roughly with the ironstone and with the necessary proportion of the portions found convenient in practise are one hutch of the fine or oxide for every 30 and ironstone calcined in running kilns there should be one of the fine ore or oxide for every 20 of the ironstone. In the cuse of the fine ore or oxide for every 20 of the ironstone. In the other calcined in the control of the fine ore or oxide for every 20 of the ironstone. In the other calcined on the open hearth the of the fine ore or oxide for every 20 of the fine ore of blackband and ironstone calcined on the open hearth the fine ore or oxide for every 3 or 4 of the fine or blackband and resolve the first of the fi creased to an extent that is easily accertained on trial. The may be sufficiently effected by scattering the fine ore or of the ironstone with spades or shovels, the contents of the being deposited in regular order, according to the proportions. During the calcination of the heap the finely divided ore

During the calcimation of the heap the nnery divided of a being raised to a high temperature becomes agalutinated and into lumps suitable for charging along with the calcined in into the smelting furnace. By the process described the pur or similar oxide becomes freed from the large percentage of usually adhering to it, and much of the sulphur, arsenic, an associated with it is volatilise I, so that the quality of the tained is improved.

GENERATING ELECTRICITY AND MOTIVE POWER

In ordinary galvanic batteries the electric current the chemical action of a liquid acid upon a metal, but the invention of Mr. PAUL JABLOCHKOFF, of Paris, has recently been mentioned in the Mining Journal in with an improved electric light, the current is produced by upon carbon of a solid body in a state of fusion. Instead a metal for the negative electrode of a battery—that is, the which is consumed in the action-he takes coke or an ar glomerate of carbonaceous matter possessing the same quali acts upon this electrode by means of nitrate of potash or a of ammonia in a state of fusion. He prefers to employ th

of soda on account of its cheapness.

The carbonaceous matter is acted upon by the molten the same manner as zinc is acted upon by the different act in the ordinary batteries. As the second electrode, he plants same liquid either platinum or other metals that are not a by the liquid in the presence of carbon. The crucible which the nitrate is fused, may construte the positive For introducing the carbon into the liquid, the former attached to it a metal rod which serves for attachm ducting wires, or he places a metal grating or perforate ceptacle in the liquid in which the carbon is contained, or receptacle being insulated from the crucible if this of the second electrode. In the latter arrangement the ca-be added from time to time, as in a furnace, in proportion

For bringing the battery into action in the first in nitrates may either be fused in advance in the crucib carbon be then introduced, or the nitrate may be placed cible in a pulverulent state, and the carbon be ignited a into the nitrate, which will become fused thereby, tery is in operation, large quantities of gases are dev in their nature to those produced by the combustion These gases, collected by any suitable arrangement, as in a boiler or closed chamber, may be utilized as motive that my improved battery serves as a source both of electrons. that my improved battery serves as a source both of elof motive power. By mixing various metallic salts with
the double effect may be obtained of regulating the
action of the battery, and of obtaining metallic depos
positive electrode, as in the ordinary electro-plating pr
According to one arrangement of batteries, construct
to this invention, the crucible containing the nitrate
forms the positive electrode, the carbon being suspeflouid nitrate in a wire-course cylinder attached to ac-

forms the positive electrode, the carbon being suspe liquid nitrate in a wire-gauze cylinder attached to ac ends of which rest upon a ring of insulating material the crucible. The latter is closed in by a hingel cove aperture, to which is connected a pipe for conveying the rated to wherever required. According to another a the crucible is made of earthenware, glass, or other a metallic substance, centrally within which is placed the cylinder containing the carbon, and surrounding this metallic substance, centrally within which is placed it cylinder containing the carbon, and surrounding this cylinder constituting the positive electrode, or this consist of a rod or bar of metal. If it be desired to emtery principally or entirely for utilising the gases motive power, the crucible or vessel containing the nitrais closed at top, and is provided with a pipe leading closed vessel for collecting the gases under any deal to provided with a pipe leading the top or dome of the crucible may in this, as also in arrangements, he provided with a hopper by a valve, the arringements, be provided with a hopper by a valve, three carbonaceous matter may be introduced from time to time with a second hopper for the addition of nitrate when rel

NORTH CORNWALL.—Arrangements at the directors' report recently issued; and it is considered hig mine will be in a profitable position within a comparatively

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MANAGERS OF COLLIERY MANAGERS.

The Promoters of this Association desire all willing to assist The Promoters of this Alberta Head at the TREVELYON the FORMATION, to MEET THEM at the TREVELYON the FORMATION, tract, MANCHESTER, on SATURDAY, 5th inst., at 3.50 P.M.

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"GENERIC FAWR," situated near CARNARVON, in the centre of the

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\$1000 would secure half-share, and might be paid for by instalments,
which be the expended in the purchase of the lease, developing the ohinasings, plant, do. Bole object of further capital is to complete the work

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TNERSHIP.—SAFE AND PROFITABLE INVESTMENT. Scill, who have for upwards of three years been engaged in allemen, who have for upwards of three years been engaged in e YALUABLE MANGANESE PROPERTIES (West of England) 85 of these PULLY DEVELOPED, showing extensive lodes of ring only additional capital and labour to raise on a large scale, ring only additional capital

girld many scattering and these properties is OFFERED to ONE post, HALP-SHARE in these properties is OFFERED to ONE post, and the properties are sulf inspected and most favourably reported on by independent and are open to the strictest investigation.

and are open to the strictest investigation.

ERMAN MINING ENGINEER, of great Practical nuderstanding some English, and fully conversant with the languages, SEEKS a SUITABLE ENGAGEMENT. Would be he could point out Rich Lead Ore Mines to enterprising "6, c.63,791," care of Messrs. Haasentein and Vogler, Frankfort on-

ENGLISHMAN, late Manager of Mines, holding several formulated criticates, DESIRES EMPLOYMENT. Well acquainted in sit both America. Geod French and Spanish scholar. Correspiblity, Assayer, and Accountant.

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FENTSEVENTE SESSION will BEGIN on MONDAY, the 1st of THE SHOOT APPLICATION.

TRENHAM REEKS, Registrar.

GLASGOW AND THE HIGHLANDS. TIL BOUTE VIA CRINAN AND CALEDONIAN CANALS, IN BOTAL MAIL STEAMER, "IONA," DAILY, at Seven A.M., and at Nine A.M., and tourist fares, free, at Messrs. CHATTO and Wimdus, Pub-y, London; or by post from DAVID HUTCHESON and Co.,

W. F. LOWE, F.C.S., Associate of the Royal School of Mines,

SSAYER AND ANALYTICAL CHEMIST

199AYS AND ANALYSES MADE OF ORES, FIRE-CLAYS, LIMESTONES, &c.

DERSS, -ASSAY OFFICE, CHESTER

PLETCHER-PAGEN, C.E., F.G.S., CHAPEL HEYS, BODMIN, ST. AUSTELL, CORNWALL,

takes the DEVELOPMENT and GENERAL SUPERVISION NS and CHINA-CLAY WORKS, and the ERECTION of description of MINING MACHINERY and PLANT. EBENCES TO WORKS COMPLETED, AND IN PROGRESS.

T. R. GLOVER, LL DEALER AND BROKER AND GENERAL FINANCIAL AGENT 2, EXCHANGE STREET EAST, LIVERPOOL.

Mr. E. JACKSON, Associate of the Royal School of Mines,

ANALYST AND ASSAYER. Complete Analyses made of Copper, Silver, Lead, Zine, Tin, and ASSAYING TAUGHT.
106, QUEEN VICTORIA STREET, LONDON, E.C.

MENS AND CO. (LIMITED), WING ENGINEERS AND MANUFACTURING CHEMISTS.

CRIEF OFFICE.
MESSION BUILDINGS, BISHOPSGATE STREET, LONDON, E.C.

PRINCIPAL WORKS.

OOR, KELLY BRAY, AND WHEAL EDWARD, CORNWALL. Agencies of Mines and Chemical Works and the London Agencies and Foreign Manufacturers and Commercial Firms undertaken.

Technical Reports and Surveys of every kind made. MANAGING DIRECTOR-DR. STEPHEN H. EMMENS.

MINING ON THE PACIFIC COAST.

MN JOSEPH RICHARDS, MINING ENGINEER, Devon Great Consols and other Mines, and Mineral Fortescue) may be consulted respecting all MINES PACIFIC COAST.

INES INSPECTED, REPORTS FURNISHED, &c.

int Joseph Richards, M.E., Battle Mountain, Nevada,

III(0), NEW MEXICO, ARIZONA, UTAH, NEVADA, AND CALIFORNIA.

F. M. F. CAZIN,

NING AND CIVIL ENGINEER,

ABERNALILLO, NEW MEXICO, U.S. OF AMERICA, INING

LLLLO, NEW MEXICO, U.S. OF AMERICA, noe in Mining and Smelting, and 10 years' experience in 1 Law, offers his services at moderate charges for Reporting Property in any of the above-named States or Territories; responsible advice as to securing full titles and possession; it utilising the property, will assist in settling existing difficient in disposing of developed mining property when held is assistance for securing undeveloped mining properties at taken in reporting, reference is made to the Mining Journal 1876, containing report on property of the Maxwell Land y; as to tec Foundation of Aug. 30 and Nov. 31, 1872, and New York in Mining Journal, Feb. 28, 1874.

F. TREGELLAS, 122. BISHOPSGATE STREET WITHIN, E.C.,

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BRES, HARLAND AND CO., STOCK AND SHARE
BALERS, 36, GREAT ST. HÉLEN'S, BISHOPSGATE STREET
WITHIN, LONDON, E.G.

THORNYCROFT MARCIAL AGENTS AND SHARE BROKERS, AND

51 SOUTH JOHN STREET, LIVERPOOL. ASSAYER AND ANALYTICAL CHEMIST,

ISRS, J. TAYLOR AND C

MINING ENGINEERS AND INSPECTORS.

11. LONDON WALL. LONDON, E.C.,

a Lonn 1 England, Scotland, Wales, and on the Continent. C O .. VALUABLE MINING PROPERTY IN COUNTY ANTRIM.

VALUABLE MINING PROPERTY IN COUNTY ANTRIM.

MESSRS. CASSON AND CHAMLEY WILL SELL, BY PUBLIC AUCTION, at the Furness Abbey Hotel, Barrow-in Furness, in the county of Lancaster, on Tuesday, the 11th day of September, 1877, at Two o'clock in the afternoon, by the Order of the Representatives of the late James Fibers. Esq., and without reserve, all that wall-known MINING PROPERTY, situate in GLENRAVIL, COUNTY ANTRIM, and known as the GLENRAVIL, COUNTY ANTRIM, and known as the GLENRAVIL, COUNTY ANTRIM, and known as the from the 1st day of August, 1871, at the yearly dead rent of £400, without any other payment to the lessor, and comprising 960 acres, more or less.

The mine has been in active operation since 1865, the present and average shipment p:r year being about 20,000 tons.

The quality of the ore is excellent, averaging from 42 to 50 per cent. of metallic iron, and containing a large percentage of alumina.

With the exception of a very small portion, the whole of the ground comprised in the lease is ore ground, and is computed to contain about 7000 tons of ore per acre. The profitable working can be vastly increased on the revival of trade.

There is a trainway connecting the mines with the Ballymena, Cushendail, and Red Bay Railway, and with the county road from Ballymena to Red Bay, thus affording facilities for shipment of the ore both from Belizat and Red Bay.

The mine is in full operation, and will be sold with the tramway, horses, and all working plant, and a stock of about 8000 tons at the pit's mouth as a full going concern.

There are a number of unexpired contracts at remunerative prices which will be sold with the country of the ore both the pit's mouth as a full going concern.

Conocers.

There are a number of unexpired contracts at remunerative prices which will be handed over to the purchasers.

The Manager will show the Works; and further particulars can be had on application to Messrs. James Fisher and Sons. Barrow-in Furness; to Mr. John Fisher, Gienravil House, Ballymens; to the Auctioneer, Ulverston and Barrow-in Furness; to Messrs. CHESTER, URQUILART, MATHEW, and HOLDER, Solicitors, 11, Staple Inn, Holborn; and R. B. D. Bradshaw, Solicitor, Barrow-in-Furness.

WITHOUT RESERVE.

IN LIQUIDATION.

IN RE THE CATHERINE AND JANE LEAD MINING COMPANY
(LIMITED). IN LIQUIDATION
LEAD MINE, together with the complete MACHINERY and PLANT. MR. FRANK LEWIS (of the Firm of Messrs, FRANK LEWIS and KENP) WILL SELL, BY AUCTION, pursuant to an Order of the Chancer Division of the High Court of Justice, at the Mart, Tokenbouse-yard, London, E.C., on Friday, September 14th, 1871, at Two o'clock precisely, the MINE

CATHERINE AND JANE LEAD MINE, Situate near the village and railway station of Penryn Deudracth, in the county of Merioneth, held under a lease direct from the freeholder for a term of 21 years, from the tat March, 1873, at a royalty of 1-15th, and a dead rent of £20, merging into the royalty; together with the PLANT, MACHINERY, and EFFECTS for The sett is about one and a half mile in length and one and a half mile in width,

working the same with the FLANT, MACHINERY, and EFFECTS for The sett is about one and a half mile in length and one and a half mile in width, and is ready for immediate working, large sums of money having been laid out upon it and the machinery. The latter being in capital working order. Particulars and conditions of sale may be had at the Mart; of Messrs. WATHON, SONS, and ROOM, Solicitors, 12, Bouverie-street, Fleet-street, E.C.; of J. D. GOVER, Esq., Solicitor, 2, King street, Cheapside, E.O.; of P. M. EVANS, Esq. (Messrs. Evans and Peirson), Official Liquidator 2, Gresham Buildings, Basinghall-street, E.O.; and of Messrs. Frank Lewis and Kramp, Auctioneers, &c., 28, Gresham-street, London, E.C.

SSRS. GLOVER AND STEWARD WILL SELL, BY PUBLIC AUCTION, at the Liver Hotel, Chester, on Wednesday, the tember, at Twelve o'clock,

THE EGLWYSEG EXTENSION SILVER-LEAD MINE THE EGLWYSEG EXTENSION SILVER-LEAD MINE, About five miles north of Llangollen, on the west side of Minera Mountain, and MATERIALS, in One Lot.

The MATERIALS consist of Iron Rails, Wagons, Miners' Tools, &c.
Mr. Thomas Davies, on the mine, will show the mine and maps.

Further particulars by applying to Mr. DYER, Amlwoh, North Wales.

VALUABLE MINING SETTS, MACHINERY, AND PLANT, IN UNY LELANT, CORNWALL-FOR SALE.

MR. A. BERRYMAN has been instructed to OFFER FOR
SALB, BY AUCTION, on the Mine, on Mondey, the 17th September
next, at noon, as a going concern, the WHOLE of the VALUABLE and EXTENnext, at noon, as a going concern SIVE MINING SETTS, called

next, at noon, as a going concern, the WHOLE of the VALUABLE and REAL SIVE MINING SETTS, called

THE PROVIDENCE MINES,
Situate in the parish of Uny Leisnt, in the county of Cornwall, together with the whole of the EXCELLENT PLANT and MACHINERY thereon, including—ONE 40 in. PUMPING ENGINE, 9 ft. stroke, with TWO 11 tons BOILERS and FITTINGS.

TORE 30 in. STAMPING ENGINE, 9 ft. and 8 ft. stroke, with TWO BOILERS, 19 tons, two fly wheels and wrought iron shafts, three stamps' axles for forty-eight heads, with heads, lifters, &c.

ONE 33 in. WINDING ENGINE, double acting, & ft. stroke, with TWO BOILERS, 10 tons and 8 tons, and WHIM CAGE.

ONE 30 in. MAN ENGIVE, double acting, & ft. stroke, one fly wheel, two wrought iron shafts, and ONE 8 ton BOILER and FITTINGS, balance bob, &c.

ONE 3 in. HORIZONTAL ENGINE, 30 in. stroke.

BALANCE BOB at engine, with connecting rod, &c., complete.

ALSO,

ALL THE EXTENSIVE PLANT, MATERIAL, GEAR,

AND MACHINERY, Particularised in an inventory thereof, which may be seen on the mine

Particularised in an inventory thereof, which may be seen on the mine.

Also, the RICH TIN LEAVINGS throughout the mine, being the accumulation of many years, during the greater part of which this has been one of the largest tin-producing mines in the county. The setts, which have about fifteen years to run, are held upon favourable terms, are large in area, and comprise rich and productive mineral ground. The water charges are remarkably easy, and the mine is most favourably situated for the supply of material.

These mines have sold since 1832, the commencement of the present adventure, about £83,000 worth of tin and about £88,000 worth of copper ore. They have also paid during the same period the large sum of £118,320 in dividends, against about £23,000 total calls. Coupling these circumstances with the fact that a large proportion of the ground included in the sette remains unexplored, a favourable opportunity is now offered for mining investment.

For further information and to view, apply to Capt. Hollow, the Manager on the mine; Mr. Edward Trithall, the Purser, Penzance; or to the Auctioneer, 28, Clarence street, Penzance.—Dated 23rd August, 1877.

MINING SETTS, MACHINERY, AND PLANT, MINING SETTS, MACHINERY, AND PLANT,
IN ST. JUST (IN PENWITH), CORNWALL, FOR SALE.

MR. A. BERRYMAN has been instructed to OFFER FOR
SALE, BY AUCTION, on the Mine, on Monday, the 24th September
next, at noon, as a going concern, all that Mining Adventure called

SPEARN MOOR
(Including SPEARN CONSOLS, with which it has recently been amalgamated), amalgamated).
Situate in the parish of ST. JUST (IN PENWITH), CORNWALL, comprising the SEVERAL SETTS and all the excellent PLANT and MACHINERY thereon,

viz.:—
ONE 30 in. cylinder STAMPING ENGINE, with new nozzles, two 12 head stamps' axles and lifters, one balance bob, and one good 10 ton BOILER.
ONE 24 in. cylinder WHIM ENGINE in good condition, WHIM OAGE, and an excellent BOILER, 9 tons.
ONE 25 in. cylinder (new) PUMPING ENGINE, with balance bob, and one 8 ton BOILER.
ONE 18 in. cylinder WHIM ENGINE, with whim cage, rope, &c., and one 4½ ton BOILER.
Several tons of tramroad iron, iron pumps, and sundry lots of other iron.

m BOLLER. real tons of tramroad iron, iron pumps, and sundry lots of other iron. A quantity of wood supports; ditto in tramroads, &c.; wood roosing; dress-

Beverat tous of a wood supports; ditto is a large quantity of wood supports; ditto is good, ac.

Also, all the TIN LEAVINGS throughout the mine
The setts have about 13 years to expire, and are held upon easy terms. The
water charges are light, and the mine is favourably situated, lying between Botailank and Levant Mines, and much of the ground included in the setts remains

Denzance; or to the Auc.

mexplored.

For further information and to view, apply to Capt. Bennetts, the Manager, on the Mine: Mr. EDWARD TRYTHALL, the Purser, Penzance; or to the Aucioneer, 28, Clarence-street, Penzance.

Dated 30th August, 1877.

PRELIMINARY ANNOUNCEMENT.

ON THURSDAY, 20TH SEPTEMBER, AT COPPER MINES, GOULOCK, AT TWELVE NOON.

EAM ENGINE, CRUSHING MILL, TWO SETS ELEVATORS; GEARING; DRIVING PULLEYS, &c., &c.; FINE AND

COARSE SIEVES: WASHING MACHINE; JIGGER MACHINERY; WATER WHEEL; CRUSHING ROLLERS; WINDING DRUM; SPUR and BEVEL WHEELS; QUANTITY of SCRAP IRON; SMITHS' ANVIL; BELLOWS: GRINDSTONE; ORAB WINCH; WOODWORK of OFFICE and SMITHY, &c.; also, PIT HEAD FRAMING, fresh and suitable for recretion (sold in consequence of the stoppage of the Mines).

MESSRS. HUTCHISON AND DIXON have received instructions from Mesars. WM. HENDERSON and CO., Irvine, TO SELL, as above, at Twelve o'clock.

The MACHINERY was erected new by the Firm at the opening of these Mines a few years ago, and is still in capital order.

POR SALE, at NEW PEMBROKE MINE, CORNWALL,—
An excellent 80 in. cylinder PUMPING ENGINE, with FOUR good 12 to
BOILERS.
25 in. DRAWING ENGINE, and TWO BOILERS.
TWO SPARE BOILERS.
THREE IRON STAMPS AXLES.
100 fathoms FLAT RODS, 3/4 inch.
A quantity of ROD FLATES and other MATERIALS.
Apply to Mr. JOHN POLETINGHODER PAR OFFICE.

Apply to Mr. JOHN POLEINGHORNE, PAR OFFICE, PAR STATION.

PRELIMINARY AUCTION NOTICE.

PRELIMINARY AUCTION NOTICE.

R. W. T. DAVEY, Auctioneer, &c., Redruth, has received instructions to SELL, By AUCTION, in the early part of next month October, 1877), at WHEAL UNITY WOOD MINE, Scorrier, Cornwall, ONE very first-class 70 in. cylinder PUMPING ENGINE, 10 ft. in cylinder, and 9 ft. in shaft, with first piece of rods and caps, and THREE nearly new 12 ton BOLLERS, and fittings complete.

ONE good double acting 21 in. cylinder STAMPING ENGINE, 6 feet stroke, equal beam, with ONE 10 ton BOLLER.

THREE iron STAMPS AXLES, 32 heads, lifters, &c., complete. 60 fms. 20 in. PUMPS, nearly new.

4 fms. 15 in. ditto ditto
20 ims. 15 in. ditto ditto
10 fms. 9½ in. ditto ditto
50 fms. 15 in. main rods, with strapping plates, &c., complete; 250 fms. nearly new 13 in. best top hemp improved patent shroud laid capstan rope; several horse whims; a quantity of new and useful timber; and all other necessary articles in general use in mines.

Dated Salem House, Scorrier, September 6, 1877.

COLLIERY IN YORKSHIRE.

THE MALTON COAL COMPANY (LIMITED) IN LIQUIDATION.

IN LIQUIDATION.

TO BE SOLD, BY PRIVATE TREATY, A VALUABLE COAL
FIELD, of about 1100 acres, near WAREFIELD, with Cottages, Siding,
and sundry Plant, &c., held, at a very low royalty, under a lease of which 55 years
are unexpired. Dead rent, £1000.
For further particulars, apply to Mr. John Mather, 12, King-street, Manchester; or to Messrs. Sale, Seddow, and Hilzon, Solicitors, 29, Booth street,
Manchester;

SLATE QUARRY.

A GOOD SLATE QUARRY FOR SALE,—
Situated in a FLOURISHING SLATE DISTRICT. Large vein of good quality and colour. Every convenience. Terms moderate.

Reports and samples forwarded on application to Mr. J. D. Jones, Upper Glynrhonwy Slate Company, Lianberis, North Wales.

TO CAPITALISTS, &c OR SALE, a VALUABLE RICH LEAD AND COPPER MINE, situated in the renowned district of RHENISH-PRUSSIA, between UREN and MECHERNICH. This property is immediately adjoining that of he Anglo-Rhenish Lead Mining Company at Maubach.

For particulars, address, "X. C.," MINING JOHNAL Office, 26, Fleet-street, onders. E.G.

NOTICE TO COLLIERY OWNERS, AND OTHERS. FOR SALE, EVERY DESCRIPTION of COLLIERY and Engineers Stores.

Apply to George Ribler, M.E., Grease Manufacturer, Coal Fitter, and Metal Broker, Trinity Chambers, Quayside, Newcastle-on-Tyne.

TO BE LET, ON LEASE, for Twenty-one Years, or such term as may be agreed upon, very valuable MINERAL and COAL MINES, extending over an area of about TWO HUNDRED ACRES, near WREXHAM, in the county of DENBICH, part of the property known as

THE STANSTY HALL ESTATE.

Containing Main, Powell, and Brassy Coal, varying from three to nearly twelve feet, and the Two Yard Coal, and other good and large Seams of Coal near the Westminster and other Collieries, being the richest and most productive mineral properties in Denbighahire.

Proposals for working the whole or any partion of the above premises, not less than fifty acres, stating the minimum or dead rent recompable out of royalties in access of the sum offered, and stating the amount per foot per statute acre offered to be paid for Main, Powell, Brassy, and Two Yard Coal, also per foot per statute acre for all other Saams workable, to be made up to the 24th of September next, Dased 24th August, 1876, Merrion, Dublin. Te for all other Seams work Lady Franch, Elm Par Dated 24th August, 1877.

> LEAD MINE NEAR CARSPHAIRN, STEWARTRY OF KIRKCUDBRIGHT.

TO BE LET, for such number of years as may be agreed

THE WOODHEAD LEAD MINE,

On the CRAIGENGILLAN ESTATE, situated in the parish of CARSPHAIRN
and STEWARTRY OF KIRKCUDBRIGHT.

This Mine was opened in 1833, has been wrought ever since, and has yielded a
large quantity of lead of the finest quality.

The PLANT, MACHINERY, &c., can be had at a valuation.

JAMES MCALL, at the Mine, will show the underground workings, as also the
plans and sections; and for further particulars application may be made to ALEXANDER MCUBEN, Solicitor, Ayr; or to Mr. THOMAS SMITH, Land Steward,
Berbeth Mains, Dalmellington, Ayrshire.

Ayr, September 5, 1817.

TO BE LET. at EAST GREENWICH, with immediate covering an area of about three acres, long river frontage, with two jettles, suitable for laying either ships or barges alongside. The buildings are very large and substantially built; there are seven high chinney shafts and boilers of about 250-horse power already fixed, also some machine tools, &o. The offices are commodious, and have just been entirely renovated and decorated throughout. For full particulars, plans, &c., apply to T. Lawrie, Architect, 4, Queen-street-place, Cannon-street, London.

POR SALE, a 14-horse power PORTABLE STEAM ENGINE, with link motion reversing gear, also gear to wind and pump.

A 25-horse power PORTABLE.

An 18-horse power VERTICAL STEAM ENGINE, and a 9½ in. cylinder VERTICAL ENGINE, and combined winding drum.

A 5-fc. PAN MORTAR MILL, VERTICAL ENGINE, and BOILER.

Apply to-BARROWS AND STEWART, ENGINEERS, BANBURY. DUMPING ENGINE ON SALE, 300 H.P., entirely new-

a Bargain. Apply,-SUN FOUNDRY, LEEDS.

HYDRAULIC PUMPING ENGINES, TWO, 50 H.P. ENGINES ON SALE-a Bargain. Apply,-SUN FOUNDRY, LEEDS.



MALLEABLE IRON CASTINGS, Every Description. W. B. MAPPLEBECK, Jun., 21 AND 22, LOVEDAY STREET, BIRMINGHAM.

LANGNESS MINING COMPANY (LIMITED).

NOTICE TO INVESTORS.

A PPLICATIONS FOR SHARES in the above company will NOT BE ENTERTAINED after THURSDAY, the 13th September, on which day the LIST will be CLOSED.

Ample machinery, which is in full working order, has been provided, and as the sinking of the main shaft progresses the mine improves every inch in depth. A new vein, from which valuable results are looked for, has been met with, and from which nice stones of very rich ore have been taken.

The principal or 15-in. vein is expected to be cut from the engine-shaft about Christman next, when returns may at once be looked for.

The vendors are not inclined to take out the purchase money until the discoveries in the main vein are cut into and fully ascertained, and probably the whole of the purchase-money will be taken out in shares.

Prospectuses and forms of application may be obtained at the Bank of Mona, Douglas, Isle of Man, and branches; at the City of Glasgow Bank, Glasgow; or of M. Parkitson, Secretary protein, 46, Athol-street, Douglas, Isle of Man.

Intending shareholders are invited to inspect the mine, where the fullest information will be given by Mr. John Knowles, the agent, on the property.

Just published, price One Shilling. MINES AND MINING IN THE LAKE DISTRICT, with MAPS and DIAGRAMS.

By JOHN POSTLETHWAITH.

Apply to the Author, Eskin-place, Keswick, Cumberland.

MAPS OF THE MINES, AND OF UTAH TERRITORY.

ROISETH'S NEW AND REVISED MAP FOR 1875,—
Size 40 by 56 inches, scale 8 miles to the inch. Handsomely engraved, cooured in counties, showing the Towns, Settlements, Rivers, Lakes, Railroads,
Mining Districts, &c., throughout the Territory, and all the Government Surveys
to date. Mounted on cloth, 22; half-mounted, £1 12s.; pocket form, £1.

Also, GENERAL MINING MAP OF UTAH, showing twenty-eight of the
principal Mining Districts adjacent to Salt Lake City, and location of the most preminent mines. Price, pocket form, 5s.

Also, NEW MAP OF LITTLE AND BIG COTTONWOOD MINING DISTRICTS, showing the location of over Four Hundred Mines and Tunnel Sites, together with the Mines Surveyed for United States Patent. Price, sheets, 6s.; pocet form, 5s.

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for sale, and supplied by—

TRUENER and Co., S7 and S9, Ludgate Hill, London; er

B. A. M. FROISETH, SaliLake City, Utah, U.S.

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STEAM BOILERS

OF ALL KINDS MADE TO ORDER AT THE SHORTEST NOTICE BY THE

TURNBRIDGE IRON & BOILER WORKS COMPANY, LIMITED, HUDDERSFIELD, London Agent-Mr. W. PARSEY, 46, FISH STREET HILL, E.C.

SOLID DRAWN BRASS BOILER TUBES

FOR LOCOMOTIVE AND MARINE BOILERS EITHER

MUNTZ'S OR GREEN'S PROCESS

MUNTZ'S METAL COMPANY (LIMITED), FRENCH WALLS,

NEAR BIRMINGHAM.

NOTICE TO COLLIERY OWNERS, AND OTHERS.

ALDER AND SEWELL,

Engineers, Ship & Engine Smiths, MANUFACTURERS OF

PIT CAGES, KEPS, TUBS AND SCREENS; FLAT, BALANCE, COUPLING AND CRANE CHAINS AND TANKS,

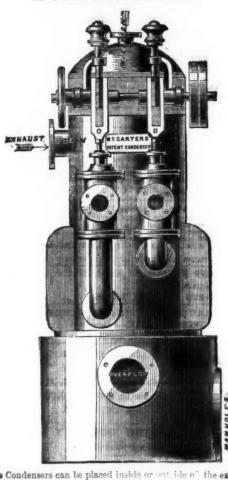
RICHMOND STREET IRONWORKS, MONKWEARMOUTH, SUNDERLAND.

PRICES ON APPLICATION.

LICENSED MAKERS.

KIRK, RAMSDEN, AND CO. (LIMITED)

HUDDERSFIELD.



These Condensers can be placed inside or out ide of the enginehouse. They draw their own injection water, and require no foundation. Specially adapted to l'umping and Winding Engines, effecting a saving from 20 to 30 per cent. in coal, and increases the power of the Engine.

Engineers, Millwrights, Founders,

FORGE PROPRIETORS.

Makers of Pumping, Winding, and Blowing Engines Condensing and Non-condensing. Horizontal and Beam Engines for all purposes,

G. HUTCHINSON AND CO., FORTH BANKS OIL WORKS,

NEWCASTLE-ON-TYNE

N E W C A S T L E - O N - T Y N E ,

Beg to draw the attention of COLLIERY OWNERS and ENGINEERS to the Oila
prepared by their special process. They never clog nor corrode, but keep the
bearings cool and clean, and will be found the beat and most ECONOMICAL
LUBRICANTS at present in the market, being very DURABLE, UNIFORM IN
QUALITY, and CHEAP. Prices, from 2s.
SPECIALLY ADVANTAGEOUS RATES FOR LARGE CONSUMERS.
References to many eminent firms who have used them constantly for years,
amongst whom may be mentioned Sir W. Armstrong and Co.; Elswick Engine
and Ordnames Works, Newcastle; B. Stephenson and Co., Engineers, Rewcastle;
B. and W. Hawthors, Engineers, Rewcastle; Hawkes, Crawshay, and Sons, Engineers, Gateshead-on-Tyne; about and Co., Engineers, Gateshead-on-Tyne,
Bamples, prices, &c., on application.

AGENTS WANTED.

"CRANSTON" ROCK DRILL THE SUITABLE FOR

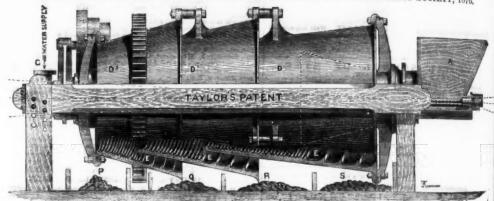
QUARRYING, SINKING SHAFTS, SUBMARINE BLASTING, TUNNELLING, DRIVING ADITS.

Is the MOST SIMPLE and ECONOMICAL DRILL now in use BOILERS; AIR COMPRESSORS, worked by Hydraulic or Steam-power; STEEL for MINING DRILLS; PUMPING, and other MINING MACHINERY supplied.

G. CRANSTON, 22, GREY STREET. NEWCASTLE-ON-TYNE.

Mr. Tair, Manager, East Hetton Quarry Company's Works, Coxhoe, Durham, writing on May 12, 1876, says—"I have pleasu testifying to the value of your Rock Drills. The two you supplied us with about six months ago are giving us entire satisfact The cost of drilling by machine is less than one-fourth that of drilling by hand. By the use of the Drills we have able very greatly to increase the out-put of stone without increasing the number of men employed."

FIRST SILVER MEDAL AWARDED BY THE ROYAL CORNWALL POLYTECHNIC SOCIETY, 1876,



By the aid of this invention any materials, which are of different specific gravity, can be concentrated and sorted mechanic while in the case of ores the fine mineral is brought up with the larger particles instead of being washed into the waste-at important feature.

This ma hine uses very lite water in proportion to the quantity of material treated, and will be found a most useful and

cient dressing apparatus.

For further particulars, and to see machines at work, apply to the Patentee,

H. E. TAYLOR, 15. Newgate Street, Chester.

MANCHESTER \mathbf{WORK} . WIRE

NEAR VICTORIA STATION, MANCHESTER (ESTABLISHED 1790).

JOHN STANIAR AND CO.,

Manufacturers by STEAM POWER of all kinds of Wire Web, EXTRA TREBLE STRONG for LEAD AND COPPER MINES.

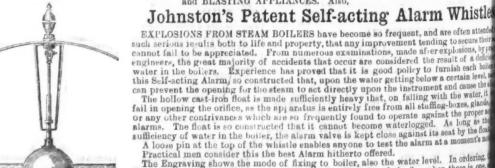
Jigger Bottoms and Cylinder Covers woven ANY WIDTH, in Iron, Steel, Brass, or Copper. EXTRA STRONG PERFORATED ZINC AND COPPER RIDDLES AND SIEVES.

Shipping Orders Executed with the Greatest Dispatch.

HENRY WATSON, HIGH BRIDGE WORKS, NEWCASTLE-ON-TYNE, MANUFACTURERS OF EVERY DESCRIPTION OF

MILL AND ENGINEERING FITTINGS,

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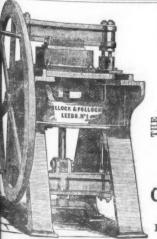
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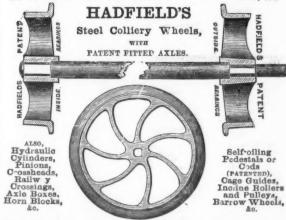
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Sharas.	12 11 8 0 6 0Jan. 1876
2000 Bryn Alyn, * l, Denbigh. (10l. sh.) 8 0 0	8 16 0 0 2 0Nov. 1877 0 7 0 0 7 0Jan. 1875 1 9 6 0 2 0Aug. 1876
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4296 Dolcoath, c, t, Camborne	111 11 3 0 5 0July 1877 0 10 0 0 10 0 Feb. 1877 285 10 0 1 0 0Aug. 1876
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15000 Great Laxey, l, lele of Man* 4 0 0 21 20 21 615 Gt. Retallack, l, bl. Perranzabulos 5 18 6 —	22 3 0 0 10 0 July 1877
25000 Gt. West Van, 1, Cardigar, * pref. 2 0 0 34 1/4 3/6 1/4 0 Green Hurth, 1, Durham* 0 6 0 3/4 2/5 3/5 2000 Grogwinion, 1, Cardigar* 2 0 0 3/4 2/5 3/5 9830 Gunnislake (Clitters'), t, s	0 1 6 0 1 6 May 1876 0 2 0 0 1 0 Aug. 1874 1 15 0 0 3 0 Aug. 1874 0 12 0 0 4 0 Feb. 1877 0 13 9 0 1 0 Oct. 1876
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10289 North Hendre, l, Wales	1 10 0 1 0 0July 1877
5000 Penhalls, t, St. Agnes	3 13 6 0 2 0July 1875
12000 Phoenix, & W. Phoenix, t, c, Link. \$ 3 4 9 44 4 44. 18000 Prince Patrick, * s-i, Holywell 1 0 0 24 13/24	2 9 6 0 4 0Nov. 1872
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80 Wheal Owles, t, St. Justs 86 5 0 80 75 80 6000 Wheal Prussia, t, Redruth 2 0 0 43/4 43/4 43/4 15000 Wicklow c, sul, t, Wicklow 2 10 0 10000 Wye Valley, t, Montgomery* 3 0 0 4 3 4	\$22 10 0 4 0 0Aug. 1875
FOREIGN DIVIDEND MINE	
88500 Alamillos, i, Spain*†	1 17 3 0 1 0 Mar. 1877
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15000 Chicago, s. Utah*	0 13 6 0 4 0Jan. 1876
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	1 11 6 0 1 6 Mar. 1873
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80000 Soottlah Austral. Mining Co., New 0 8 0 34 34 12500 Sierra Buttes, g, California*† 2 0 0 134 134 134 13000 South Aurora, s, Nevada* 5 0 0 34 134 134 2253000 St. John del Rey*† (£5 stock & multiples dealt in) 290 310 2006 F Colina, c, s* So. America	15 per centJune 1877 1 15 0 0 2 0Oct. 1876
25000 Victoria (London)*, a Australia	0 11 8 0 d. for Dec. 1876
28005 Victoria (London)*, g. Australia 1 0 0 34 54 34 1805 Western Andes. r.* New Granada 5 0 0	
NON-DIVIDEND FOREIGN MI	NES.
20000 Anguilla Phosphete West Indian (2000 Invest)	Last Pr. Cios. Pr. Last CailFully pd.
10000 Australian Central, g* (also 6000 deferred shares)	31 31 Fully pd.
3)000 Blue Tent, hyd., California	31 Fully pd.

5000	Anguilla Phosphate, West Indies (4000 issued)	20	10 0	***	***	Fully pd.	180
19000	Aggestine a Argentine Personal (4000 1880ed)	10	0 0	0 80		Bartina - 4	60
1,0000	Argentine, g, Argentine Republic	- 5	0.0	000	314 21/4 31/4	Bully pd.	60
				900			9
			0 0	***		Fully pd.	45
a 3000	Blue Tent, hyd., California	- 5	0 0	0.00		Fully pd.	60
			0.0	080		Fully pd.	100
			0 0		400	Fully pd.	66
			0 0	0.00	36 34 34	Pully and	160
			0 0	080	314 234 334	Fully pd.	10
			0 0	***	***	Dec. 1871	300
				489	34 34 34	Fully pd.	64
8000	Hornachos, * s-i, Spain	30	0 0	***	- 141	July 1873	140
12000	Hultafall, * l, bl, Orebro, Sweden	10	0 0	***	14 13 14	Wastles - 0	100
+0000	Imperial ligarilian Collieries Breetle	5			61/2 51/4 61/4	Fully pd.	100
10 1000	Imperial Brazilian Collieries, Brazil* I. L. G. S. California*		0 0	***	- "		120
50000	I. X. L., g, s, California* Javaii. g. Nicaragua*	- 1	0 0	***	16 36 36	Fully pd.	80
			0 0	***	36 36	Fully pd.	8
			0.0		78 78	Fully pd.	
120 10	Lanestosa, * i, z, Viscaya, Spain (£2 shares) Maiabar, g, Cujombia* (67165 issued)	10		***	***	Fully pd.	120
75000	Malabar, g, Colombia* (67165 issued) Malabaso, g, Colombia* (7400 issued)	- 1	10 0	***	***	Mar. 1876	
40000	Malpaso, g, Colombia* (7400 pref. shares, fully paid)	1		***	3/8 5/8 7/4	Fully pd.	100
12000	Menzenberg, c, Honnef, Germany		0 0	***	1/4 1/8 3/4	Fully pd.	200
4588	New Bensoerg, i, l, Germany New Quebrada, c, Venezuela		8 0	***	- "	Fully pd	
55000	New Quebrada, c, Venezuela* New Zealand Kapanga, c, Commendati	5	0 0	***		Nov. 1876	10
20000	New Zealand Kapanga a Coromandala	5	0 0	***	2 23/ 3	NOV. 18/8	120
3000	New Zealand Kapanga, g, Coromandel* Oregon, g, Oregon, U.S. (preference shares) Papulcillo, c, Chill*t (Estanta december)	5	0 0	***	134 11/4 13/4	Fully pd.	
80000	Panulcillo, c, Chili* (£80000 debentures)	4	0 0	***	4 41/8		60
#0000	Postavena United - Telescope december (188)	4	0 0	***	14 34 14	Sept. 1875	85
\$0000	Pestarena United, g, Italy*† Providencia and New Rossvic a Manhael	8	0 0	***	14 1/0 1/4		70
			0 0	***		Fully pd.	30
					***	Fully pd.	50
#2,161	000 Rio Tinto, c, Huelva, Spain Rossa Grande, g, Brazil (d sharea)	A	0 0	000	59 67 59	Fully pd.	120
1 00000	Rossa Grande, g, Brazil*† (£1 shares) Russia Copper, Orenburg and Ufa**	20	OCK	***	59 57 59	Fully pd.	100
30000	Russia Copper, Orenburg and Ufa*; San Pedro, c, Chili*	0	19 0	000	3/8 3/4	July 1872	30
25000	Ban Pedro, c, Chili* Silver Plume, s, Colorado*	10	0 0	100	2% 134 234	Fully pd.	500
10000	Bilver Plume, s, Colorado" Tecoma, s, Utah"	- 3	0.0	200	36 36 36	Fully pd.	50
20000	Tecoma, s, Utah* Thornbill Reef, g, Australia*	1	0 0	000		Fully pd.	200
20000	Thornbill Reef, g. Australia"	10	0 0	-02	34 34 34	Fully pd.	10
43174	Thornhill Reef, g, Australia* United Mexican, s, Mexico*† Utah, g, s-i, Utah*	.1	0 0	083	- 111 /4 /4	Fully pd.	120
14000	With a a Trahe	28	15 %	00	2 116 2	Man 1676	30
\$5000	Vorke Peninsula - 8	- 86	0.0	199	- "	May 1875	150
40000	Yorke Peninsula, s. South Australia Doct	1	0 0	000	36 36 36	Fully pd.	30
					1 1/1	Fully pd.	6
	Have made calls since last divide	nd	WAS	paid	- 100 74 1	Fully pd.	60
				-			5

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Share	NON-DIVIDEND MINES. Mines. Paid.	Last wk. Clos. pr	She
40000	Aberdaunant, I, Lianidioes 1 0 0	. 11/ 1 11/	210
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50000 12000	Ballycummisk, c, Schull	% % %	
3937 30000 1000	Belstone.*c, Devon 127,000 rts, Da.) 0 0 Blane United,*s-t, Cardigan 1 0 0 Blane United,*s-t, Cardigan 1 0 0 Blane United,*s-t, St. Agnes 3 7 6 Bodidris,*t, bt, Denhighshipe 1 0 0 Bodillope Vale,*s-t, Durham 5 0 0 Botallack, t, c, St. Just[12 5 0 Bowden Hill,*ma 1 0 0 Bradwell Moss Rake 1 0 0	18118	
200 2000 6000	Botallack, t, c, St Just 1	17% . 15 17%	10
8348	Caldback Fells, l, Cumberland*	314 3 314	
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8000 24 40 20000	Cemental van.	11/4 1 11/4	
512 10000	D'Eresby Mountain, l, bl, Llanrwst 20 0 0	. 25 20 25	
10000	Derwent,* l, Durham	3 2½ 3 ½ ½ ½	
3000 60±0 18000	East Chiverton, i, Perranzabuloe 6 14 6 East Craven Moor, I, Pateley Bridge 10 0 0 2 0 0 East Goginan, I, Cardigan 2 0 0 Fast Van, I, Llanddroes* 5 0 0 Deast Wh. Lovell, I, Helston 8 11 0	11 10 11	
20000	East Wh. Lovell, t, Helston	11/1 1 11/	1
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		1414.14	10
12000 9500 6000	Great Holway,* !, Flintshire	3 23	i
	Grosvenor, l, Holywell (£1 sh.) 0 15 0 Harehope Gill, * l, Durham (£1 sh.), 0 5 0 Harwood, * l, Durham 0 15 0 Hush Eisteddfod Minera, * l	 1	10
200 2500	Islay,* l, Scotland 28 0 0 Killaloe, sl, Tipperary! 1 0 0		8
12000	Ditto, preference	% % % 1% % 1%	10 5 10
	Ditto, 10 per cent. pref., 1l. each 0 10 0. Levant, c., f. 8t. Just 6 6. Lian rhaindr, l. Montgomery* 2 0 0. Lianrwat.* l. Carnarvon 2 0 0. Lianywat.* l. Cardigan 1 0 0.	% % % 	5 2 5 2
8500	Medlyn Moor, t, Wendron 1 17 4 Mellanear Copper, Hayle* 2 0 0	3 3	10
11000	Melyadw l. Cardigan* 3 0 0 Monydd Gorddu, l, Cardigan*(Red.) 5 0 0	3 1½ 2 ¼ ¾ ¾ 4 3 4	10 5
4525 20000	Nant-y-Ronen, s-l, Cardigan*	= :::	1 10
20000 16000 1492	New East Foxdale, s-l, Isle of Man. 0 15 0 New Fowey Consols, t, St. Blazey*. 8 0 0 New Hendra, t, Breage	2 1% 2	2
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5400	Old Tincroft, c, t, Lelant*	4 34	1 2 2
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0000	Red Rock, * I, Cardigan 2 0 0	% % % 2% 1% 2%	1
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6000 10000 4000	South Wheal Crofty, c, Illogan \$1 ! 0 \$2 South Wheal Crofty, c, Illogan \$2 ! 10 \$2 \$2 \$2 \$2 \$3 \$2 .	1414 14	\$100
80000 6400 14000	Sunnyaide, * l, Durham	214 2 214 114 1 114 14 11	Brk.
10000 10000 12000	Talylont, s.l, Cardiganshire. 1 0 0 Teesdale, *, Durham 1 0 0 Teiga Valley, l, &ar., Bridford 1 0 0 Temple, l, Cardigan* 1 0 0 Toigns Consols, *, Redrath. 5 0 0 Trebelgh Consols, *, Et. Ire 0 9 0 Treleigh Wood, t, Redrath. 6 1 0 Treiyon Consols	1% 1 1% 8% 8 8% % 8 8%	21 21
840	Trethellan. s-/, Crantock* 2 0 0	- × ×	Stk 10 Stk Stk
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5000 5500 7000	West Assheton, l, Carnarvon	1 3/ 1 20 10. 20, 76 3/6 3/4	10
3000 5000	W Craven Moor, l, Pareley Bridge*. 10 0 0 West Godolphin, t, c, Breage 2 6 0	% % % % % % 13 10 19 3 2% 8 1% % %	1: Btk.
3000 30000 8000	West Mary Ann, l, Menheniot 0 36 West Milwr, s-l, Flint 1 0 0	1 % 1	Stk. Stk.
2000	West Roskear. ' s-l, bl. c, Camborne. 2 0 0 West Tankerville, " l, Salop	2 11/4 2	Stk.
3000 8000 600	West Tresavean, * c, t, Gwennap 1 0 0 West Wheal Peevor, t, Redruth 0 10 0 West Wheal Seton, c, Cambornet 47 0 0	11% 76 11% 2 134 2 136 136 136 27% 25 27%	10 28 8tk
512 5000 2635	Wheal Agar, c, Illogan 11 10 0 Wheal Basset, c, Illogan; 21 2 6 Wheal Costes, c, St. Agnes 2 0 0. Wheal Comfort, c, Gwennap 1 5 0. Wheal Corbor, c, Favistock 4 1 0. Wheal Grenville, c, Camborna* 2 18 6. Wh. Mary Hutchings*, Plant	3½ 2½ 3 8 6 8 2 1½ 2 5 4½ 5	Stk. Stk.
9000	Wheel Bearen & Ded at ympton 1 16 U	11/4 11/4 11/4	Stk.
2 100 41444 480	w neal Peevor, t, Redruth 6 7 6 W heal Russell, c, Tavistock 2 1 6 W neal Uny, t, t, Redruth 13 11 6 W hite Oliff, t, Llaarwst 6 9 9	4 3% 4 % % % % % %	12 10 Stk
	nde; cl, coal; c, copper; g, gold; l, lead; s, e	Ilwan : al alata :	Btk

b, blende; cl, coal; c, copper; g, gold; l, lead; s, silver; sl, slate;
 s-l, silver lead; l, tin; z, zine.
 Limited Liability Companies; † quoted on the Stock Exchange;
 l have paid dividends.

IRON AND COAL CO

Share	Cowpressy. Cowpressy. Abbot, John, and Go. [L.] Abbot, John, and Go. [L.] Albion Steel and Wire Go. [L.] Alliami Colliery Co. [L.] Bagnali, John, and Sons [L.] Bagnali, John, and Sons [L.] Bagnali, John, and Sons [L.] Bilson For Ore Co. [L.] Bilson & Cramp Meadow Coll. Co.[L.] Bilson & Cramp Meadow Coll. Co.[L.] Bilson & Cramp Meadow Coll. [L.] Bown, John, and Or. [L.] Brown, John, and Dixon [L.] Brown, John, and Co. [L.] Campell and Co. [L.] Cardigan Steel and Wire Co. [L.] Cardigan Steel and Wire Co. [L.] Chapel House Colliery Chapel House Colliery Charlton Iron Co. [L.] Chatterley Iron Co. [L.] Chillington Iron Co. [L.] Consett Iron Co. [L.]	MPA	NIE
£100	Abbot, John, and Co. IL.	Phi	-
15	Albion Steel and Wire Co. [L.]	275	
100	Ashbury Co. [L.]	14	0. B
10	Bagnall, John, and Sons (L.)	90	1
80	Bilbac Francisco Co. [L.]	10 (0. 7
10	Bilson & Crump Meader C.	10 (0 III
50	Blaen Cwmbach Coal Co. II.	110	0 19
100	Bolckow Wood and Steel Co. [L.]	4 (0
80	Bowling Iron Co. [L.]A	45	0
50 50	Britannia Ironworks [L.]	60	0 0
100	Brown, Hailey, and Dixon [L.]	40	0 0
5	Cakemore Colliery Co. II.	70	0 0 18
100	Cammell and Co. [L.]		0 0 1
10	Cardiff & Swappes St. Con Coal [L.].	8	00. 2
10	Cardigan Steel and Wire Co. [L.].	9	0 0 1
8	Chanel House Collins and Steel [L.].	8 1	0 0
60	Charlton Iron Co. II.	8	00 1
10	Chatterley Iron Co. [L.]	65	0 0 12
1	Clea Hill Collision Co. [L.]	10	0 0 26
10	Consett Iron Co. [L.]	1	
50	Consett Spanish Ore [L.]	71	0 0 12
30	Darlington Land Co. [L.]	40	0 0
80	Davy Brothers [L.]	12 1	10 0 12
5 82	Diamond Fuel Co. [L.]	23 1	0 0 5
100	Fox Samuel and Co. [L.]	5 39 80	A
10	General Mining Ass. [L.] (2) returns	80	0 0 31
20	Great Western Coal Co. [L.]	17	0 0 2
18	Hopking Gilber Co. [L.]	2	0 0.
50	Knowles, Andrew, and Sons [L.]	11	0 0 8
10	Llay Hall Coal, Iron, & Firebrick L.	10	0 0
80	Llypvi, Ogmore & Tondo Co. [L.]	8	0 0.
10	Lydney and Wigpool Iron Ore L.	80	0 0 7 8 0 15
6	Chatterley Iron Co. [L.] Chillington Iron Co. [L.] Clee Hill Colliery Co. [L.] Consett Fron Co. [L.] Consett Spanish Ore [L.] Consett Spanish Ore [L.] Consett Spanish Ore [L.] Darlington Iron Co. [L.] Darlington Iron Co. [L.] Diamond Fuel Co. [L.] Diamond Fuel Co. [L.] Fox, Samuel, and Co. [L.] Fox, Samuel, and Co. [L.] General Minga Asa. [L.] (£1 returned Great Western Coal Co. [L.] Hopkins, Gilkes, and Co. [L.] Howels, Andrew, and Sons [L.] Lay Hall Coal, Iron, & Firebrick [L.] Littledeau Woodside Coll. Co. [L.] Lydney and Wigpool Iron Ore [L.] Mersey Steel and Iron Co. [L.] Mersey Steel and Iron Co. [L.] Mold Argoed Colliery Co. [L.] Monkland Iron Co. [L.] Monkland Iron Co. [L.] Monkland Iron Co. [L.] Monkland Iron Co. [L.] Moyady Iron Ore [L.] Mwyady Iron Ore [L.] Mwyady Iron Ore [L.] Mwyady Iron Ore [L.] Mwyady Iron Ore [L.]	10	0 0
10	Midland Iron Co. [L.]	8	0 0
10	Mold Argoed Colliery Co. [L.]		00 1
4	Monkland Iron and Coal Co. [L.]	10	0 0.
100	Nant-y-Glo and Blaina (8 p.c. pref)	100	A 0.15
30	Nerbudda Coal and Iron [L. & Red.]	2	0 0 1
10	New Bharlston Collieries [L.] Pref	30	0 0 1
10	Northmptn. Coal, Iron & Wagon [L.]	10	0 0 2
10	Northfield Iron Co. [L.]	8	0 0 1
35	Monkland Iron and Coal Co. [L.] Myndy Iron Ore [L.] Nant-y-Glo and Blaina (8 p. e. pref.) Nerbudda Coal and Iron [L. & Red.] New Sharlston Collieries [L.] Fref. New port Abercarn Coal Co. [L.] Northmpth. Coal, Iron & Wagon [L.] Northfield Iron Co. [L.] Northfield Iron Co. [L.] Northon Green Coal Co. [L.] Palmer's Shipbuilding and Iron [L.] Patent Nut and Boit Co. [L.] Patent Nut and Boit Co. [L.] Patent Shaft and Axletres [L.] Pelsail Coal and Iron 1.]	1	0 0
100	Parkgate Iron Co. [L.]	65	0 0 1
20	Patent Nut and Bolt Co. [L.]	14	0 0
20	Pelsali Coal and Iron 1] Phoenix Bessemer Co. [6.]	10	0 0
		40	0 0 1
10	Rhymney Iron Co. [L.] Richards and Co. [L.] Sandwell Park Colliery Co. [L.]	80	0 0 22
100	Sandwell Park Colliery Co. [L.]	10	0 0
100	Dieto Dew	100	0 0 17
100	Shotts Iron Co. [L.]	100	0 0 p
60	Silkstone & Dodworth Cl. & Iron[L.]		0 0 8
20 50	Skerne Iron works [L.]	20	0 0 16
25	Shotts Iron Co. [L.]. Sheepbridge Iron and Coal [L.] Silkstone & Dodworth Cl. & Iron[L.] Skerne Iron works [L.]. Somorrostro Iron Co. [L.]. South Wales Coal Co. [L.]. Staysiav Iron and Coal Co. [L.]		0 0
100	Staveley Iron and Coal Co. [L.] Ditto ditto New	60	0 0 6
100	Staveley Iron and Coal Co. [L.] Ditto ditto New Bouth Cleveland Ironworks [L.] Swanses Valley Steam Coll. Co. [L.]. Thames Iron Company Tredegar Iron and Coal Co. [L.] Ditto B. shares Ulverston Mining Co. [L.]	10	0 0 4
10	Swanses Valley Steam Coll. Co. [L.].		0 0
100	Thames Iron Company		0 0
25	Ditto B. shares		0 0 13
		13	0 0 1
	United Bituminous Collieries L. L.	1	0 0
100	Vancouver Coal [L.]	100	0 0 ¥
80	Welsh Ironworks Co. [L.]		0 0
25	W. Cumberland I. and Steel [L.]	20	0 0 18
10	West Mostyn Coal [L.] (12 p.c.pref.)	5	0 0
10	Whitehaven Iron Co. [L.]	10	0 0
100	Welsh Ironworks Co. [L.]	10	0 0
400	HIGH CORESECTION CO. [D.]	10	0 0.15
	WAGON COMPAN	T T We	
	WALLEY COMPAN	T E PUR	34

				- 1
	WAGON COMPAN	NIE	8,	3
10	Birmingham Wagon Co. [L.]	10	0 0	195
10	Ditto, 2nd issue	- 4	0 0	4
	Ditto, pref., 6 per cent	10	0 0	124
20	British Wagon Co. [L.]	10	0 0	15
10	Gloucester [L.]	10	0 0	12
10	Ditto, 5th issue	5	0 0	15
	Met. Rail. Car. and Wagon Co. [L.]		0 0	
5	Ditto, pref., 6 per cent	5	0 0	53
50	Midland	50	0 0	84
20	North Central Wagon Co	20	0 0	374
5	Rail, Car. [L.] (Oldbury)		00.,	
5	Ditto, pref., 6 per cent	5	0 0.,	83
20	Sheffield Wagon Co. [L.]	15	0 0	31
	Yorkshire Wagon Co. [L.]	10	0 0	4
20	Toran alon oo. (w)	40		nii)

	TELEGRAPH COMP	AR	1740.
Bt."	Anglo-American	100	0 0 583
10	Brazilian Submarine	10	0 0 6
20	Direct United States Cab'e	30	0 0 121
10	Eastern	10	0 0 19
10	East. Exten., Australia and China	10	0 0 73
10	Great Northern	10	0 0 7
25	Indo-European	28	0 0 18
10	Mediterranean Extension		0 0 2
	Reuters	8	0 0 99
Male	Submarine		0 0225
10	West India and Panama	19	0 0 2
20	Western and Brazilian	30	U U 2
2000	W	da 81	0003111

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	MISCELLANEOUS.
	Sik. Atlantic and Great Western Leased Lines, Rental Trust
	25 Austral, Mort, Land and Finance [an]
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	Hek Cent, Pacific of Calif., 186 More. O Pro-
	26 City of London Real Property Land
	28 Copper Miners of Eng. (7 p. c. p. c.)
	Dismond Book Doring
	16 English and Foreign Credit
1	
1	
1	A Hen. Phos. & Chem. Works out and
1	1 Glaisdale Whinstone Quarry 1 0 0
	1 Greenhill [L]
ı	17 Hudson s Bay Company
ı	10 Huntington Copper and Sul. Co 9 0 0
ı	
1	Stk. Illinois & St. Louis Bridge, 1st Mort. 100 0 0
1	Stk. Ditto, 2nd Mort., 7 per cent 100 0 0
1	Stk. Illinois Cent. Sinking Fund, Sp. cant. 100 0 0
1	8tk. Ditto, 6 per cent
	Ditto, Surplus Certificate
1	Ditto, Surplus Certificate Stk. Lehigh Val. Con. Mort., A, 6. p. cent. 100 0 0
1	Stk. Lehigh Val. Con. Mort., A, c. p. cont. 10 0 0
1	
1	Btk. N. Cent. Rail. Com. Mort., 6 per cent. 6 0 6
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1	
1	Stk. Pennsyl. Gen. Mort. 6 p. cent., 1910, 100 0 0
1	Stk. Pennsyl. Gen. Mort. o p. coms, 100 100 0 0 Stk. Ditto, Con. Siak. Fund, 6 p. ct., 1905 100 0 0 100 0 0 0
1	8tk. Ditto, Con. Sink. Fund, 6.5. 41. 100 0 618 8tk. Scottish Aust. Investment Company. 100 0 618
1	8tk. Ditto, 6 per cent. Preference 100 0 6
ı	
١	20 Suez Canal shares Maints [L.] 13 00
1	
ı	
J	10 Tharsis Suipnur and Copper Co 10 0 01
ı	10 Tharsis Suipnur and Copper St. Union Pacific Land Grant, 1st Mort. 100 0 016
1	Stk. Union Pacific Railway, 1st Mort 100 0

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